ANIMALS IN SOCIAL LIFE:

HUNTING AND HERDING IN IRON AGE SOUTHERN INDIA

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In memory of my grandmothers,

Che-Hsuan Chin and Rángam Ramabadran.

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ABSTRACT

ANIMALS IN SOCIAL LIFE: HUNTING AND HERDING IN IRON AGE SOUTHERN INDIA

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In order to create a more holistic perspective on the interrelationships between human and animal populations, this dissertation considers animals as integral and dynamic aspects of human social life. Using data excavated from the Iron Age (1000 B.C. to 300 B.C.) site of Kadebakele (Northern Karnataka, India) as a case study, I examine intersecting issues regarding the current state of knowledge in South Indian (pre)history, and zooarchaeological approaches to animal use.

First, I explore anthropological considerations of social organization, highlighting the notion that social relations of difference are shifting and mutable; this insight stands in contrast to historiographical narratives of South Asian (pre)history, which have often emphasized static hierarchy and inequality. Furthermore, my research rejects traditions of considering South India derivative of the northern subcontinent, rather than an independent locus with unique, historical trajectories.

Second, I consider zooarchaeological studies of animal use with specific focus on models of subsistence and social relations. Specifically, the coupling of subsistence modes and social organization has led to erroneous assumptions that do not adequately

represent the complexity of social life. Further, animals are ritually used in ways that cannot be subsumed under rational-economic models of resource exploitation.

Finally, faunal data from Kadebakele provides evidence for a subsistence regime that differentially included hunting, herding and ritualized use of cattle. These data suggest that quotidian consumption incorporated non-mammalian taxa, while domestic stock was reared for secondary products. Cattle were imbued with social value, and were ritually consumed in feasting events associated with megalith construction. The social distinctions associated with these tasks were therefore overlain and differentially highlighted in Iron Age society.

This dissertation concludes that animals must be conceptualized as integral components of social life; residents of Kadebakele engaged with animal populations in different ways, and these interactions were central to their relationships with one another.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

Chapter 1: Introduction

1.1 Introduction to Research Orientation

The diverse and often complex ways in which individuals and groups differentiate themselves from others have been the subject of study for millennia. Anthropologists and archaeologists have investigated the materiality of these relationships, which infuse all aspects of social and cultural life as material culture is invoked in specific contexts to highlight, create, challenge or erase social differences. Although faunal remains are a ubiquitous class of archaeological materials, they have not been adequately considered in this regard. In fact, subsistence modes are often erroneously mapped directly onto social organization without regard for overlapping or contesting modes of food procurement; this approach thereby overlooks the fact that relationships between individuals and groups are inexorable from the ways in which food is produced, prepared, eaten and discarded. While zooarchaeologists have provided important insight into practices of animal management, acquisition and diet, these lines of evidence have been under-used to address human relations of sameness or difference.

The dynamics of human-animal relationships have been particularly overlooked in considerations of ancient South India, where archaeological studies have often relied heavily on cultural-historical models of diffusion or evolution, and adjoining faunal analyses tend to be composed of mere species lists. Here, I seek to broaden the analytical scope through which social distinctions are addressed, to show that animals in human societies are dynamic and integral vehicles of difference, similarities and social

interactions. Specifically, my dissertation examines consumption and subsistence practices during the Iron Age (1000 B.C. to 300 B.C.) in South India. Historical documents and archaeological research indicate that this was a period of emerging social differentiation and economic specialization, paralleled by changes in political organization and the expansion of local economies into larger configurations. However, subsistence practices were likely to be rooted in local ecologies, practices and cultural logics and may persist in the context of otherwise changing lifeways. Socio-culturally mediated practices of animal use in Iron Age society highlight relationships of social distinction and sameness; these are the central issues addressed by my research.

The topic of social organization has been traditionally considered with regard to complexity and institutionalized inequality. These concerns are particularly relevant to previous treatments of South Asian (pre)history and social organization, which have been dominated by a myopic focus on relations of hierarchy and inequality. I submit that social relations in general are better conceptualized as relations of difference or distinction, whereby individuals in a social group differentiate or distinguish themselves from one another, or from other groups. As such, political and economic realms are best understood as imbedded in historically specific, socially-mediated, and socially-constructed realms of distinction.

Archaeological research provides an approach through which we may examine material dimensions of social relations in various spatial and temporal contexts. Moreover, such data reveal the *realia* of life in the past, which cannot be described or studied by any other means. Archaeological data also provides important insight with

regard to historical time periods that contain textual documents, and regions specifically described by texts. A large chasm exists between proscription and practice, and thus, it is naïve to assume that one can understand the past from textual sources alone. Given the archaeologically documented patterns of long-distance exchange and socio-political centralization during the Iron Age, and influence of religious traditions during the following Early Historic period, archaeological investigations can provide insight towards the intersections of external influences and local traditions in Southern India.

1.2 Introduction to Research Area

This dissertation explores dimensions of animal use and social differentiation during the Iron Age period in Northern Karnataka, India by examining practices of consumption and procurement in the faunal remains of a site in the Tungabhadra River Valley (Figure 1.1). Using faunal remains as proxies of consumption and subsistence practices, I characterize the roles of animal populations in subsistence and symbolic dimensions of human social life; I suggest various axes of sameness and difference were invoked through animal use practices during the Iron Age. I posit that consumption practices may have been one means of reinforcing and indexing social distinctions during these periods, and animal-based subsistence strategies will likely have shifted with the changes in local economies and specialized production. The growth of regional and long-distance exchange systems, agricultural intensification, and craft specialization are all socio-economic shifts that may have affected the roles of animals in the South Indian Iron Age. While the precise domain of social distinctions influencing the consumption of

animals may not be isolatable (be they class-, caste-, gender-, or religiously-based), my research will consider how consumption practices might contribute to differentially creating, maintaining or erasing axes of difference among Iron Age residents of the Tungabhadra Valley. My research is ultimately aimed at situating the local region in the context of broader regional and inter-regional patterns of interaction and influence.

The Tungabhadra Valley in Northern Karnataka is an ideal place to investigate the politics of social differentiation as it is situated between what is generally considered "northern" and "southern" India. Consequently, much more research has been conducted in regions to the north and south, with the research area being largely overlooked, particularly with regard to the Iron Age. Similarly, a corpus of literature describes the regions just north and south of here during the following Early Historic Period. Although no textual source is directly relevant to Iron Age social life in Tungabhadra River, these bodies of texts can be useful to provide a broad historical context for the following Early Historic period, when the degree of integration between the study region and centralized polities that lie to the North (the Mauryan Kingdom) and South (Tamilakam) are more clearly documented. While there are Mauryan rock-edicts placed in the region, the degree of direct control exerted over the area remains unclear, as does the general nature of the relationship between the North and the Tungabhadra Valley.

1.3 Introduction to Research Methods

Zooarchaeological analyses provide crucial insight regarding the composition of animal remains recovered from archaeological sites. The wide range of data that can be discerned from these types of data include measures of relative species abundance, age, sex, wild versus domesticated status, methods of food preparation/carcass dismemberment, and animal management strategies. Changes or continuities in animal-based subsistence practices reveal the articulation between animal-based and other economies, as well as reflect distinctions between groups within a community and over time. In addition, various modes of procurement may testify to the degree and nature of interaction between groups in the region. Furthermore, the consumption of specific animals in distinctive social contexts may serve to highlight or diminish axes of social differentiation.

Faunal data also address strategies associated with husbandry, pastoralism and exploitation of wild resources through hunting. While these subsistence modes have often been mapped onto social organization, I argue that they more accurately conceptualized as dynamic and overlapping. Indeed, the consumption and procurement activities are interpenetrating avenues of human-animal relations. Both as food and live creatures, animals are likely to be important for both material and symbolic content; in turn, some type of distinction may be transferred in various contexts to the animal's owner, captor, slaughterer, butcher, preparer and consumer.

1.4 Chapter summaries

This dissertation is organized into nine chapters. Chapter 2 presents the theoretical bases for my research; here, I briefly review previous research on social change and complexity, focusing on characterizations of social differences in South Asian society. In Chapter 3, I introduce zooarchaeological models developed for modes of animal use in human society; specifically, I review previous research regarding hunters, pastoralists and agriculturalists. Furthermore, I discuss social and symbolic dimensions of animals that do not adhere to rational-economic models of subsistence and economy. In Chapter 4, I provide a brief explanation of the geography and ecology of the Tungabhadra Valley, as well as background to the Iron Age in Southern India. In order to contextualize the scholarship on the Iron Age, I also present a brief summary of the preceding Neolithic and later Early Historic periods. Each of these descriptions includes a summary of previous research and presents the current state of research about subsistence during that time.

Chapter 5 discusses fieldwork undertaken at the site of Kadebakele, Karnataka, describing excavation areas and summaries of preliminary archaeological analyses and radiocarbon results. Chapter 6 presents the methods by which the faunal assemblage at Kadebakele was analyzed; here, I describe the types of data recorded for each specimen as well as the processes by which species identifications were secured. Secondly, I present a consideration of the effects of taphonomic agents on the site's deposits, with specific focus on density-mediated attrition and fragmentation. Measures of animal identity within the Kadebakele assemblage are presented in Chapter 7. Here, I discuss the

species spectrum, age and sex profiles, and pathologies observed within the assemblage. In chapter 8, specific practices revealing patterns of consumption are of central concern, as I present data regarding the distribution of species, body parts, burned bone and butchery marks throughout the site's deposits. In Chapter 9, I present evidence for ritual use of cattle deposited within megalithic strata at Kadebakele. Chapter 10 is a discussion and synthesis of the data presented in the previous chapters, and an effort to interweave various lines of evidence to present an understanding of Iron Age animal use in the Tungabhadra Valley. Specifically, I describe practices of hunting, animal husbandry, secondary products exploitation, and megalith construction. The generalized picture of animal use at Kadebakele reveals a complex approach to subsistence as well as various dimensions of social differentiation. Finally, I consider the ways in which anthropologists have considered subsistence and society, focusing on interdigitation of animals and humans in social life, and present suggestions for future research.

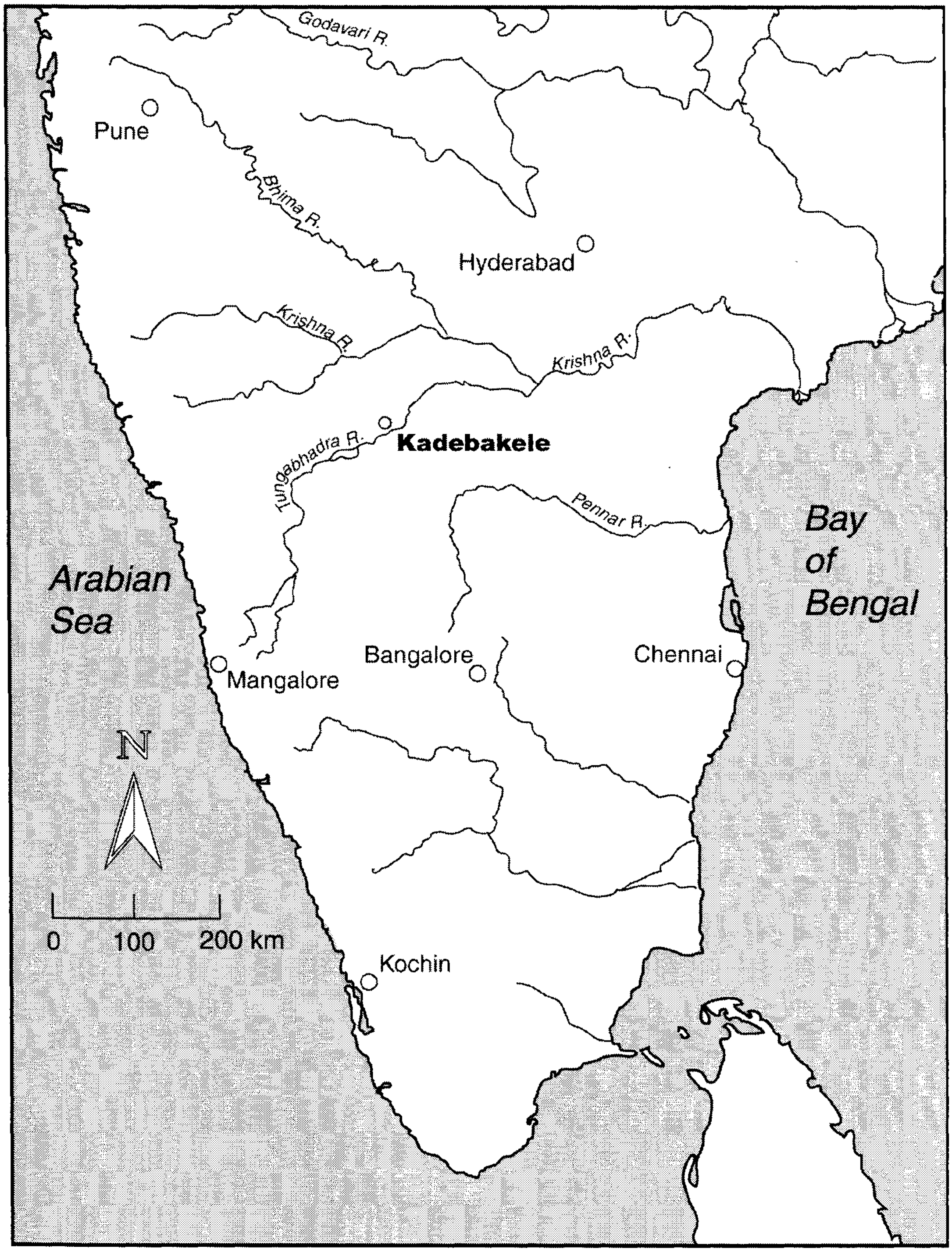


Figure 1.1 – Location of research area in Southern India.

Chapter 2: Theoretical Concerns: Social Distinctions and South Asia

2.1 Introduction

Historical and archaeological evidence suggest that major shifts in political, social and economic organization took place during the Iron Age and Early Historic Periods in South Asia. The specifics of these changes will be discussed in Chapter 4, but it will suffice to say for the moment that the material record of these times suggest the emergence of the subcontinent's first "Empire"[1] (Thapar 1997), the codification and dissemination of institutionalized religions (Ray 1994; Heitzman 1984), and the intensification of agricultural production and overseas trade (Morrison in press; Champakalakshmi 1996). Furthermore, numerous centers of political centralization began to come into focus during these periods, perhaps most sharply in the Gangetic Plain (Thapar 1997) and in Tamilakam (modern day Tamil Nadu and Kerala) (Abraham 2003). The material record of Northern Karnataka similarly indicates myriad changes in social organization and subsistence strategies, as well as complex inter-relationships between the region and areas to its north and south (Morrison in press, 1997). My research at the Iron Age site of Kadebakele, Northern Karnataka, focuses on examining various axes of social differentiation which existed or emerged in the Tungabhadra Corridor during these periods.

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[1] I am referring here to the so-called Mauryan Empire, which became widely influential in the subcontinent during the Early Historic Period. The term "Empire" is problematic as it relates to the influence and power of the Mauryan dynasty; however, it is widely used within the existing corpus of scholarly material, and thus appears here for the sake of consistency.

Changes in political and socio-economic organization over time and space have been studied by legions of scholars in various ways, despite sometimes bitter disagreement over the mechanisms or meanings of such transformations, it is generally agreed that social organization[2] is inextricable from socio-political[3] realms of life. A brief review of the literature reveals that scholars have defined these concepts in distinctive and often mutually exclusive ways; terms such as "stratification", "complexity", "progress", "hierarchy", and "inequality" have been used to convey such ideas. I argue here that it is possible and useful to encompass many of these arguments by considering social organization as the concept of difference or "distinction".

My position is founded upon Bourdieu's (1990) discussion of distinction:

> "Individuals or groups are objectively defined not only by what they are but by what they are reputed to be .... Social science therefore has to take into account of the two kinds of properties that are objectively attached to [individuals or groups]: on the one hand, material properties, starting with the body...; and on the other hand symbolic properties which are nothing other than material properties when perceived and appreciated in their mutual relationships, that is, as distinctive properties (135)".

My usage of the term "distinction" draws upon Bourdieu's insights, but seeks to broaden (and simplify) the concept for my purposes. I suggest that social distinctions thus include such general categories as gender, age, class, religious affiliation, lineage, and occupation, for example, and may be suggestive of such aforementioned properties, as well as inequalities between groups and individuals. That is to say, inquiries about social

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[2] The term "social organization" can be generally understood as referring to social interrelationships and parameters of differences which exist within or between people, or groups of people.
[3] Aspects of the "socio-political" include, but are not limited to, the relationships between people and the means of production, local and extra-local influences of political authority, and access to resources.

organization may be framed as questions about how individuals in a social group differentiate or distinguish themselves from one another, or from other groups. Drawing from positions espoused by *substantivist* economic anthropologists (i.e., Dalton 1961; Polanyi 1957), I suggest that politico-economic realms are best understood as imbedded in historically specific, socially mediated, and socially constructed realms of differentiation.

In order to explore these issues, it is necessary to first discuss how the subject of social differentiation has been treated; specifically I present previous research on how such relations have been formulated through an examination of archaeological material culture. Here, I review how many scholars have considered the vast theoretical realm of social differences, focusing on discussions of the emergence of "social complexity" and institutionalized inequality. Given these presentations, I suggest the utility of "social distinctions" as a framework for investigating social differentiation through archaeological material culture. Last, I focus on theories of social organization as they related specifically to South Asian (pre)history, and how such models have affected our understanding of the South Asian past.

2.2 Theorizing Social Distinctions

A large body of scholarship is focused on issues of social inequality, the nature and definitions of power, domination and resistance; it would be impossible to discuss and review this corpus in its entirety. Because my research focuses on the broad concept of social differentiation, and its relation to economic – specifically animal-based –

specialization, here I limit my presentation to consider those theoretical frameworks that link social differentiation, political economy and ecology.

Social Evolution and Complexity

Debates over the concepts of social differentiation and changes over time are mired in questions of how to distinguish what characters reflect or constitute social stratification and "complexity". According to neoevolutionary models[4], "progress" of a culture can be objectively measured in functional, energy-capturing terms, as a structural expression of organization. In the realm of anthropological and archaeological research, the most influential scholars to employ this paradigm were White (1959, 1949), Steward (1955, 1949, 1948), Childe (1968, 1957), Carneiro (1981, 1978, 1970), Sahlins and Service (1960), and Service (1975, 1962). Childe's postulation that technology was the primary means for adapting to environmental pressures largely influenced White; the latter's ecologically centered model is anchored in his definition of culture as extrasomatic adaptation to the environment, and technology as a means of harnessing nature's energy. In the mid-20th century, the emergent New Archaeology was largely influenced by White's (and his students Sahlins and Service) commitment to materialist determinism, search for cultural laws, and adoption of evolutionary theory (Wenke 1981:85). As such, evolutionary progress of human culture was equated with adaptation, and social complexity was defined in terms of increasing efficiency of energy capture (White 1959, 1949).

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[4] Neoevolutionism is a framework which sees "human behavior as highly patterned and largely governed by materialistic constraints" (Trigger 1998a:22).

These aforementioned models of social development did not address what factors were primarily responsible for stimulating socio-cultural transformations, though many scholars had emphasized ecological variables as the stimulus for diachronic change. For example, in response to what he perceived to be an overly-simplistic unified (universal) model for social evolution presented by White's students, Steward (1955) proposed that different evolutionary trajectories related to variation in the natural environment; that is to say, cultural change resulted from adaptation to shifting environmental contexts. Further, environmental factors became prominent influences on theories of social development with what can be best described as 'systems theory': these models conceptualize society as a functional system comprised of discrete, measurable processes and mechanisms (i.e., Haas 1982; Renfrew 1973; Clarke 1968), and when combined with evolutionary perspectives, adaptations to socio-environmental stresses provide direction for social changes.

Questions regarding social stratification are unavoidably linked to modes of political organization and the distribution of power. The correlation of stratification or inequality with social complexity is founded upon Marx's (1906) studies of class stratification, and Weber's (1968, 1947) multidimensional model of stratification, whereby numerous lines of stratification contribute to power relations (McGuire 1983:99; LeGros 1977). Drawing upon such models, Fried (1960) posited that stratification emerged as a result of political upheaval, while Service (1975, 1962) emphasized changes in social structure (primarily kinship) in order to explicate socio-cultural changes over time, describing four levels of social integration (band, tribe, chiefdom and state). Fried

similarly posited four levels of social evolution, though these were categorized based on stratification as a proxy for complexity. Lowest on Fried's scale of complexity were so-called 'egalitarian' or 'unranked' societies, composed of 'interchangeable' building blocks (e.g., Sahlins 1972; Durkheim 1933). In contrast, 'rank society' was characterized by fewer positions of status than people capable of filling these positions; status tended to be limited by birth order. Stratified, and finally, state-level societies were respectively more complex, and evolution from one stage to another was based on population pressure, resource availability and modes of exchange (Fried 1960).

'State' level societies have been of particular interest to archaeologists, as many have argued that the institutionalization of inequality is often evidenced in the formation of centralized political authority, internal differentiation, restricted access to resources, and extrahousehold production. As such, many archaeologists have discussed material markers of social complexity and stratification most commonly in the context of state formation. For example, Childe (1950) presented archaeological markers of urbanism and social stratification, while Wright and Johnson (1975) discussed the importance of hierarchy and specialized administrative apparatus of the state.

Redefining Social Stratification

The above-mentioned models have been critiqued in a large number of ways. Scholars have pointed out that evolutionary models are inadequate primarily because there is no clear means of defining 'systems' in anthropological analysis, and attempts to model or simulate the operation of complex cultural systems tend to be reductionist and/or ethnocentric (Shanks & Tilley 1987; Wenke 1981:101). For example, Levi-Strauss

(1963) notes that White's model of energy efficiency privileges an adaptive ideal present in Western society, but one that is absent from the majority of human societies. Similarly, Hempel (1959: 989) critiques purposive explanations of socio-cultural behavior, and posits that functional explanations tend to be teleological (e.g., Giddens 1984: 236). Some also argue that evolutionary models lack strong systemic viewpoints and create erroneous dichotomies between ecological and social variables (Sanders and Webster 1978; Adams 1966).

Furthermore, cultural evolutionary models rely on the use of a typological methodology which limits understandings of social change. When cultures are homogenized as 'types'[5], processes of change are regarded as dependant, functional variables (Blanton et al. 1996; Feinman 1995; Yoffee 1993; McGuire 1983:94). Thus, attempts to classify societies based solely on diagnostic 'traits' are unproductive, and disparagingly referred to as 'check-list' archaeology (Kristiansen 1984). For example, archaeological investigations have recognized the diversity in the form and organization of what are generally conceptualized as 'chiefdoms' such that one stagnant typological category describing such varied societies results in an unsatisfactory representation (Jacobson 1986; Carneiro 1981). Similarly, archaeologists have all but abandoned the search for explanatory models for the origin of 'pristine' states in the Old World and have critically re-examined Service's evolutionary typology as appropriate units of study (Stein 1998:3; Yoffee 1993).

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[5] Indeed, Sahlins (1958) explicitly states this project as the aim of his research program: "The scientific aims of the study of culture are served by reducing the masses of heterogeneous materials on different cultures to general proportions, empirically verified, which illustrate variable relationships between differing sets or *types* of phenomena" (emphasis added, 247)

More generally, functional and evolutionary paradigms are focused too narrowly on explicating *what* qualities, traits, or modes of interaction exist rather than investigating *how* such relationships are created, maintained or altered. These research programs are predicated on the problematic, and implicit, assumption that societies change by adding hierarchical levels, which result in greater social inequality. As such, these models do not account for the addition of distinct avenues of inequality or parameters of social differentiation (Kristiansen 1984; McGuire 1983:109; Blau 1977). That is, socio-evolutionary models do not explain the variety of social behaviors and formations that characterize the human past because they tend to emphasize vertical stratification over dimensions of horizontal differentiation (Feinman 2000a; Blanton et al. 1996; Shanks and Tilley 1987; McGuire 1983:99).

As such, the utility of the term 'hierarchy' itself has come into question, as some challenge the assumption that hierarchical arrangements necessarily underlie all differences in social complexity (Feinman 2000a; Mills 2000; Crumley 1995; McGuire 1983). For example, McGuire (1983) problematizes the perception that all socio-cultural changes are reducible to the variable of 'complexity', arguing that such an approach groups all diachronic and cross-cultural developmental changes under a singular heading. Instead, he suggests that complexity itself can be deconstructed into a number of potentially independent variables, such as stratification, diversity, inequality and heterogeneity (Blau 1977). Furthermore, Crumley (1995, 1987) challenges the notion that hierarchical power relations are endemic to social complexity by suggesting that social elements are not immutably ranked in relation to one another. She dissects the link

between complexity and hierarchy as one that normalizes distinctions between simple and complex, resulting in unranked (or less stratified) societies conceptualized as 'simple' by contrast (1987:157). Similarly, Blanton et al. (1996) and Feinman (2000a) argue that all social groups have diverse power strategies that have not been adequately explored by most researchers. As a result of these insights, social organization is best conceptualized as complex dialectical processes with shifting, permeable boundaries and multiple forms.

Many scholars have pointed out that functional and evolutionary schemes of social organization are unable to describe the reality of social life because they are underwritten by a meta-narrative of rational action and progress. As a result, they neglect specific historical factors that influence change (Spencer 1990, Hodder 1986, 1982), and overlook social factors that actively constitute individual identities and affect social practices (Sheenan 1993; Brumfiel 1992; Shanks & Tilley 1987:175). Many of the aforementioned critiques and insights have prompted scholars to embrace a different perspective on the past by shifting the focus of research[6] to various other issues[7] (such as agency, gender, occupation and age, for example).

Often termed "interpretive archaeology", this research program attempted to formulate the recursive relationships between material culture and power relations (Sherratt 1990; Hodder 1984, 1982), and rectify biases that resulted from research focused on elite lives (e.g., Adams 2000; Deetz 1996; Scott 1994; Spector 1993).

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[6] However, the evolutionary project has not been wholly abandoned. See, for example, Feinman (2000b), Trigger (1998b), and Dunnell (1990).
[7] The diverse body of work I am referring to has been classified as 'post-processual' or 'interpretive' archaeologies (see Preucel 1995; Shanks and Hodder 1995)

Interpretive approaches thus attempted to move beyond categorical definitions of social 'types', focusing instead on relationships both between and within polities, and the diverse groups and perspectives within a society (Hannerz 1992; McGuire 1983:117). Such research has shown that rejection of ecological/evolutionary frameworks that posit 'cultural systems' as homeostatic and subject to selection and adaptation allows archaeologists to explore the contingent and negotiated aspects of socio-cultural entities (Brumfiel 1992). In light of such critiques, the social construction of identity (i.e., Butler , 1993, 1990) and ethnicity (i.e., Barth 1969) are realms of human experience archaeologists have begun to engage with (Barrett 2001; Meskell 1999; Jones 1997).

Given these insights, I utilize the phrase '*social distinctions*' to describe how various axes of social differences might contribute to maintaining, creating or altering axes of differentiation during the South Indian Iron Age. By doing so, I aim to engage with archaeological perspectives that emphasize the critical assessment of categories of social differences insofar as they are discursively and historically constituted (Meskell 2001, 1999; Gatens 2000; Brumfiel 1992), and may vary in both space and time. As such, identities are both created and negotiated through social practice (Bourdieu 1990, 1977) and interface with material culture. Categories of difference are furthermore historically specific, culturally-mediated and socially-constituted; that is to say, they are shaped by specific cultural logics.

Given the aforementioned analytical orientation, the concern over how differences or changes in social organization can best be analyzed and discussed remains to be addressed. Before delving into the specifics of examining axes of distinction, it is

important to contextualize the research program in terms of previous research in South Asia. It is crucial to broaden the scope through which South Asian (pre)history has been viewed particularly because South Asian history and society have been invoked as historical and anthropological models of hierarchy and stratification. South Asian political, social and ideological formations are popular case studies used towards explicating despotic rule, and the power of ideology in maintaining social structure. Here, I argue that such conceptualizations are gross oversimplifications which have created a strong narrative of a static South Asian past, stripping individuals of the propensity to act outside the structures of political or ideological dictates.

2.3 Social Differentiation in South Asia

Anthropological and archaeological research in South Asia has made important contributions to studies of social organization, specifically regarding the nature of power relations and social organization in the subcontinent. Historically, South Asia has been a popular case study for theories of social differentiation and power relations. As 19th and 20th century historians and philosophers contemplated the distinctive features of the "Orient", India's long and diverse history was distilled into the salient features of caste, Hinduism, and kingship. Two distinctive narratives have influenced much of South Asian historiography: Marx's Asiatic Mode of Production presents a village community ruled by an unchallenged despot, and Dumont's conceptualization of the caste system suggests a rigid, highly stratified society. Here, I argue that such presentations of South Asian social organization oversimplify the interplay of local relations, religious practices and

economic production. Furthermore, both paradigms deny the possibility of a South Asian history-proper; that is, both theories are predicated on some static aspect of Indian culture. For Marxist scholars, the so-called "village republic" is a fixed form of local relationships; for Dumont, the caste system is the enduring, central part of Hindu (Indian) social relations.

However, historical and archaeological research in South Asia has challenged both of these presentations to create more complex and dynamic notions of social organization. Importantly, regional and local trajectories begin to come into focus as a result of these research efforts. It is now clear that local distinctions are more important, and more interesting, than previous efforts to characterize India, or the "Orient", as a whole. One important insight into South Indian history specifically is Stein's model of the "segmentary state." Here I briefly discuss Stein's presentation and suggest how it has both focused discussion on local contingencies, and broadened perspectives on the South Asian past more generally.

Asiatic Mode of Production and the Village Republic

Marx's concept of the Asiatic Mode of Production[8] homogenized non-European histories into a singular model of political economy that came to characterize the 'Orient'; in South Asia this framework has underlain many theoretical considerations of power and hierarchy (Wittfogel 1957; Piggott 1950). Marx identified "Oriental" production as a specific mode lacking urbanism, private property and a bourgeoisie (Krader 1975). He

[8] Marx's theory of political organization in India was heavily influenced by the observations of Bernier (1968 [1671]), who published his observations of Mughal society while serving as Emporer Auragzeb's physician.

argued that capitalism did not arise in Asia because these societies were characterized by communal appropriation (Marx 1964, 1904). Furthermore, the lack of social dynamics and resulting rigidity of the Asiatic Mode of Production necessitated that the Asian peasant community continuously reproduced itself and was thereby incapable of achieving structural reform on its own: "there was no past in the real sense of the term; hence, historiography was superfluous" (Breman 1988: 7). As a result, Asia does not enter "history" until the advent of colonialism and the introduction of capitalist production.

Following Hegel (1956 [1899]), Marx believed that the institution of caste in South Asia precluded the development of a strong nation-state (Inden 1990: 72). The notion of Oriental Despotism (Wittfogel 1957) is part and parcel with the Asiatic productive mode, as it stresses the strength of coercion and exploitation in the operation of state power over village communities[9]. British Colonial officers often reported that each Indian village was "a separate community or republic … and exhibits a living picture of that state of things which theorists have imagined in the earlier stages of civilization, when men have assembled in communities for the purpose of reciprocally administering to each other's wants" (Wilk and Hammick 1980 [1817]:136). The South Asian village has been conceptualized as a self-sustaining, isolated, and closed system comprised of a traditional, passive population. This characterization of the 'village republic' was echoed throughout British Colonial observations of Indian society and pervades Marx's model of

[9] The concept of the Oriental Despot became central to many functionalist models predicated on the adaptive nature of states and the instrumental roles of elites in the development of complex societies (Morrison 1994: 186).

the Asiatic Mode of Production. In this framework, class structure was virtually non-existent, village communities engaged in cooperative reciprocation between caste groups, and all citizens had equal access to land and resources (Breman 1988). Thus, state structures were conceived of as imposed atop a "basic stratum of unchanging rural people, values, and practices" (Morrison 1994: 187).

More recently, archaeological research and historical re-evaluations have demonstrated the shortcomings of Marxist models of production in Asia and challenged perceptions of monotonous continuity in South Asian (pre)history. Cohn (1961), for example, described the multiple "pasts" of an Indian village, showing that many distinct histories are relevant to the residents of a single village. Indeed, the concept of peasant society in South Asian historiography has engendered an unfortunate preoccupation with the Indian "village" itself, and heretofore resulted in a lack of attention to the interrelations between the local and extra-local regions (Breman 1988: 12).

Homo Hierarchicus and Caste

In contradistinction to the self-sufficient village communities Marx and Wittfogel believed characterized pre-Colonial South Asia, many anthropological and sociological considerations of social organization in South Asia have emphasized hierarchy and stratification. Specifically, scholars have focused on the institution of 'caste', considered peculiar to India and Hinduism. Conceptualized as the essence of Indian society, caste has often been treated as though it were the unchanging agent of the civilization "... from the rise of the Indus valley culture and the arrival of the Aryans down to the present day

regionalism and caste in electoral politics" (Inden 1990: 83). Furthermore, caste divisions have been tied in with the racial theory of an Aryan invasion and conquest, whereby "the motive principle of Indian caste is to be sought in the antipathy of the higher race for the lower, of the fair-skinned Aryan for the black Dravidian" (Hutton 1963; Risley 1891: I, xxxviii; also Risley 1915). While Dumont (1966) critiqued the racialist formulations of caste society in India, he did not break with the tendency to emphasize caste as the primary agent of Indian society and "civilization". As such, his scholarship focused on the complementary relationships between purity, power, and land rights. Weber (1958) similarly correlated the persistence of traditional lifeways in India with the rigid "irrational" structure of the caste system.

More recently, scholars have suggested that caste cannot be assumed as the central hierarchical signifier for past social formations (Parish 1996; Dirks 1992; Inden 1990), and stratification should be formulated in a multi-dimensional fashion (Wadley 1994; Appadurai 1988). Studies of Indian history that tend to think of social behavior as determined by the caste system, ultimately model behavior as a function of underlying structure. As such, human agency is displaced by an essence or structure; this position assumes that socio-cultural systems are pre-formed and immutable, rather than challenged, contested and completed (Inden 1990: 263-4). Furthermore, attempts to explain the ideological construct of caste (i.e., Dumont 1970) rely largely on Brahmanical texts as representing the major, timeless expression of Indian civilization. This type of reading is at best partisan, if not overly prejudiced, as other points of view are ignored or deemed less important (Thapar 1995: 101).

Stein's Segmentary State

The political organization of pre-Colonial South India has often been discussed in marked contrast to the centralized political formations throughout the history of Northern India. As such, government functions in the southern subcontinent were thought to have been imbedded in kinship and other types of groupings (caste, lineage, etc) rather than under strong centralized authority. Stein (1995, 1977) suggests that such administrative systems characterized much of the Chola rule over the region in the late tenth to thirteenth centuries (A.D.), and suggests that such political organization can best be described as a 'segmentary state'. This means of political organization is characterized by internally differentiated and localized political structures having limited territorial sovereignty, which is restricted towards its peripheries. Furthermore, the capacity of each center or political domain to use force is limited in range and extent. Stein also refers to Chola inscriptions throughout South India as evidence of ritual sovereignty and segmentary rule, rather than the direct political control associated with 'unitary states'.

Within this arrangement, the subordinate segments exercise the same kind of control as the center, albeit over less people. Through this analysis, Stein suggests that political organization need not conform to the normative models of effective centralized control believed to characterize "the State" in other parts of the world (i.e., Zagarell 1995). This resonates with Morrison's (1994: 189) observation that "complex" societies in South Asia have been discussed as 'alternates' to the 'basic' constructions modeled on research in Mesopotamia because the former do not seem to fit nicely into the models established by the latter. However, Stein's conceptualization of the Chola segmentary

State has been criticized for its generalizations; research has demonstrated, for example, that Chola administrative strategies shifted over the course of their 400 years of power. Subbarayalu (1973) and Heitzman (1984) note, for example, that Chola administrators became increasingly involved with the local economies of regions under their political authority in the 11th century AD (Kulke 1995: 28).

However, Stein's analysis is important insofar as it demonstrates that numerous types of social entities displaying some, but not all, of the traits used to identify 'the state' in the archaeological record of South Asia. For example, Sinopoli's (1994) analysis of the Vijayanagara Empire demonstrates how the degree of state intervention in regional economy depended on the nature of the activity and the profits the state could extract from that form of value. Her analysis illustrates significant differences in state control and the involvement of non-state sectors in regional economic matters. Last, the concept of the 'segmentary state' illustrates the fact that the distinction between center and periphery cannot be reified into simple spatial demarcation (Breman 1988: 29). As such, society may be structured along vertical, as well as horizontal, axes and relations that both encompass and transcend the level of the local community.

2.4 Chapter Summary

In summary, it is clear that evolutionary and functional models for social organization and diachronic change do not adequately represent the dynamics and diversity of past social groups. Furthermore, questions of stratification and hierarchy must be balanced with perspectives that consider horizontal differentiation. Axes of

distinction are thus historically contingent, socially mediated and socially constructed. In South Asia, these insights are particularly relevant given a historically-established focus on stratification in the subcontinent. The Asiatic Mode of Production has oversimplified local power relations to suggest that egalitarian "Village Republics" were unable to instill social change throughout pre-Colonial India. Dumont, alternatively, emphasized the restrictive and static influence of the caste system as responsible for preventing social change in Indian history. As stated, archaeological and historic evidence have deconstructed these mythic edifices and have begun to shed light on the fact that South Asian regional histories are distinctive and dynamic.

What remains now is to bridge our understandings of social distinctions with archaeological evidence and return to the question of analyzing and investigating social distinctions. How *can* axes of difference be elucidated through archaeological material culture? Numerous scholars have pursued this type of research by examining archaeological materials such as ceramics (Jones 1997), iconography (Joyce 2000; Yates 1993), monumental constructions (Brubaker 2000/1; Liden 1995) and mortuary data (Meskell 1999; Tarlow 1999). My research seeks to contribute to this body of scholarship by using faunal data to address the creation, maintenance and negotiation of social distinctions as they are manifest through the complex relationships between animals and human societies. In order to create a more holistic view of the past, I explore how animals (both as food, and as live creatures) participate in and mediate human social experiences. I intend to use faunal materials to examine patterns of consumption, while attending to the role of live animals as labor, sources of secondary products, and beings imbued with

spiritual significance. Now, I move to examine how scholars have used animals and animal remains to discuss avenues of social life, specifically production, consumption and symbolic dimensions of animals in human societies.

Chapter 3: Zooarchaeological models

3.1 Introduction

As discussed in the previous chapter, social distinctions are constituted through historically contingent, socially mediated cultural logics. As such, we must explore the relationships between material culture and social life in order to begin to elucidate such axes of differentiation through an analysis of archaeological data. Specifically, my analysis focuses on archaeological faunal remains to highlight the interdigitation between human and animal populations over space and time. I posit that animals are complex and dynamic parts of human social experiences, and as such they should not be solely conceptualized as sources of food and labor, but as live beings with biological needs as well as specific social meanings. In this chapter, I discuss previous research that draws robust connections between social distinctions, animal use and animal remains in an effort to apply such insights to my investigation of the Iron Age Period in Northern Karnataka, India.

One of the challenges of archaeological research is to build bridges connecting material patterns with behavior, and behaviors with cultural logic and social facts. As such, I present scholarship that pertains to all sides of this linkage: ethnographic observations of behavior and decision-making, ethnoarchaeological investigations of behaviors and the material traces they leave, archaeological analyses that interpret material culture in specific socio-historical contexts, and considerations of the "symbolic" dimensions of animals in human social life. I argue that while the acts of

eating, hunting, cooking, or slaughtering an animal in the South Indian Iron Age cannot be directly observed, through careful analysis and excavation we may discern how animal use participated in maintaining, creating or challenging axes of differentiation.

Below, I delineate the realm of human-animal relations into two broad interpenetrating, avenues of interaction: food procurement strategies and consumption practices. First, I review anthropological and archaeological research on animal-based economies, focusing on the subsistence practices of hunting, pastoralism and farming. I will argue that methods of procuring animals for food or use of animals for other products are likely to play important roles in differentiating individuals and/or communities over space and time. These three subsistence modes will be examined because they are the most relevant to the periods of interest; prehistoric subsistence economies in Southern India have been described as differentially emphasizing agricultural and animal products, with a decrease in hunting, and an increase in cultivated plants over time (see Chapter 4). Next, I discuss how aspects of social relations are manifested through consumption patterns, focusing as well upon "symbolic" significances that certain animals may have in human societies. I follow this with a critique of the rational-economic models of animal use that permeate many zooarchaeological analyses. Last, I introduce the direction of my research at the Iron Age site of Kadebakele[10] in the Tungabhadra Valley, Karnataka, India.

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[10] The excavation and exploration of Kadebakele has been overseen by the Early Landscapes of the Tungabhadra Corridor (EHLTC) project, co-directed by Drs. Kathleen Morrison, Carla Sinopoli and R. Gopal. My research falls under the auspices of this project, and I am grateful to the co-directors for inviting me to participate in this research and for their assistance in facilitating my analysis.

3.2 Modeling Subsistence Practices and Social Distinctions

Building a thorough understanding of the past through archaeological remains necessitates a reliance on robust models through which meaning or significance can be bestowed upon recovered remains. Here, my purpose is to elucidate what types of archaeological signatures are associated with certain subsistence practices, as well as what social significances may be inferred from these practices. While it is somewhat artificial to discuss these modes of procurement separately from patterns of consumption, I do so in order to address subsistence patterns in some detail. Specifically, I focus on how both archaeological and anthropological research has contributed to contemporary understandings of subsistence modes, material patterning, and various axes of social distinction.

Here, I examine three modes of subsistence practices (hunting, pastoralism and agricultural production); for heuristic purposes, I describe and discuss these practices separately in order to consider the material signatures and social implications of each. Concurrently, however, I recognize that such strategies were likely interwoven through relationships between specialized producers, and/or as integrated subsistence strategies. That is to say, while there is some utility in conceptualizing these modes separately, in reality there are likely to be degrees of overlap and complementarities between modes of food procurement (and to take this further, procurement influences consumption patterns, and vice versa).

Hunting

Hunting is often discussed in the context of hominid evolution (e.g., Stiner 1994, Klein 1982) or as a means of understanding subsistence strategies of hunter-gatherer groups (e.g., Yellen 1977; Lee 1968). Hunting is a subsistence mode most often associated with "simple" societies, often described as mobile, small scale and egalitarian social groups (e.g., "band-" or "tribe-" level societies in the socio-evolutionary scales previously discussed). Lee (1968) correlates the importance of hunting with latitude, suggesting that populations at low latitudes rely more heavily on plant foods rather than hunted animals. This model has been extensively critiqued as simplistic and erroneously based on the marginalized, patchy distribution of ethnographically observable hunter-gatherer populations.

It is often assumed that hunting becomes a less important component of subsistence with increasing sedentism, economic specialization or centralized distribution of resources (Hodder 1990; Zeder 1988, but cf. Kent 1989); these social changes are often presented part in parcel with increased social heterogeneity (as discussed in the previous chapter). In addition, the practice of hunting game is often considered in contradistinction to the less prestigious task of "gathering" plants; both these duties have been discussed as distributed solely along gendered lines, as the tropes of Man-the-Hunter and Woman-the-Gatherer permeated models of human evolution in the 1960s and 1970s (i.e., Washburn and Lancaster 1968).

These gendered explanations have in part been corroborated by ethnographic observations which tend to emphasize the contribution of large game, often procured by

male hunters, and ignore or overlook the importance of smaller fauna such as reptiles, birds, and small mammals. For example, Rappaport (1967) focuses his study on the importance of the domestic pig in Tsembaga (New Guinea) society. He provides a rather extensive list of fauna and flora that are consumed by the Tsembaga, but is concerned primarily with the ecological, social and ritual functions of pig rearing and consumption. In his brief discussion of food taboos, he notes that married women and children are the only social groups who lack explicit dietary restrictions; as a result, hunted wild animals such as reptiles, rats, frogs, birds and insects make up part of the daily diet. The remainder of the book details the complex relationships between males, pigs, and other social groups. The quotidian diets of at least half of the Tsembaga population (married women and children) is relegated to less than one chapter of the text, but the social import of pig slaughter, and the ceremonies associated with pig consumption, which are incidentally far from a part of daily life, are the focus of Rappaport's account.

Marks (1979) similarly observed hunting practices among modern populations in Zambia and noted that wild animals were hunted and consumed by different sets of people within a group of hunter-foragers. Like Rappaport, Marks reported that small, wild fauna such as birds and rodents tend to be hunted and consumed by women and/or children. Alternatively, large game such as buffalo are hunted and preferentially consumed by adult males. Marks (1979:56) states that "although males of all ages trap and snare small game and birds, this activity is not given the social esteem or surrounded by rituals as is the pursuit of wildlife with a gun or formerly with a bow and arrows" (see

also Lupo and Schmitt 2005). Thus, gender and age divisions influence procurement and consumption practices, and have varying social significances in terms of differentiation.

Further, aspects of the aforementioned description of hunting societies have not held up under scrutiny. The so-called 'egalitarian' nature of hunters has been critiqued and deconstructed (Speth 1990; Price and Brown 1985); for example, skilled hunters have direct access to meat at the kill site, and food-sharing is not equal in these groups (Speth 1990). Scholars have also documented the complex nature and prevalence of hunting practices in diverse contexts, arguing that our conceptualizations of "hunting" must be broad enough to include both small and large game (Neusius 1996; Brothwell and Jones 1978; Linares 1976, see *Agricultural Production* discussion below). Gathering behaviors have similarly been shown to be an important, although often overlooked, contribution to overall subsistence (Watson and Kennedy 1991; Slocum 1975; Lee 1968). With these considerations in mind, it is imperative that hunting not be privileged over gathering/foraging, nor assumed to indicate egalitarian social-relations. Instead, we should consider gender and age among the various axes of distinction that influence the procurement and consumption of animals (Lupo and Schmitt 2005; Bird and Bliege Bird 2000; Laderman 1991). However, these differences cannot be assumed to be the most important, or even relevant, ones impacting the social organization of hunting in all societies over time and space.

In South Asia, ethnoarchaeological research has documented interactions of exchange between forager groups, such as the Boyas and Yerkulas, and agriculturalists in the region (Murty 1994, 1992). Such relationships are likely to have a long history

throughout the subcontinent, evidenced by various archaeological cases (Morrison 2002, Possehl 2002; Murty 1992, 1994; Possehl and Kennedy 1979) and historical texts, the earliest of which describe relationships during the Early Historic period in Southern India. The Tamil Sangam corpus, for example, contains references to communities of hunters that were integrated into Tamilakam society, but continued to retain an identity separate from agriculturalists and pastoralists (Murty 1994; Subrahmanian 1966). The Ashokan Edicts also mention various unconquered groups in Eastern and Central India who "maintained a livelihood from animals of the forest" (Thapar 1997: 118). Some authors have argued that exchange between hunters and agriculturalist communities was an important component of subsistence in South Asian prehistory as well. According to some models, wild fauna may have been procured by foragers and reached agro-pastoral settlements through exchange interactions (Selvakumar 2000: 129; Murty 1992, 1985). However, Miracle (2005) suggests that assemblages dominated by wild taxa may have also served as hunting blinds for Neolithic herders and farmers themselves.

Furthermore, hunting behaviors should not always be considered as subsistence-oriented per se; for example, historically documented royal hunts in Europe and Mughal India were elite, restricted events that had little to do with subsistence needs, and more to do with demonstrations of leisure and wealth. Among modern Central African foragers, Lupo and Schmitt (2005: 15) similarly observe that certain animals are hunted for "nonconsumptive benefits" such as social status and political power, rather than for caloric profitability.

Archaeologically, a subsistence regime that relies heavily on hunted animals is generally identified through a predominance of wild animals in a faunal assemblage, coupled with the absence of known domesticates. Furthermore, numerous ethonoarchaeological studies revealed that many hunters process animal carcasses in specific ways that leave unique archaeological signatures (Hudson [ed.] 1993; Binford 1981). Binford (1987, 1981), for example, provides important insight into the relationships between behavior and site-function. He posited that site-function and procurement behaviors could be explored through examining the constitution of a faunal assemblage. It is important to keep in mind that not all animals carcasses are processed in the manner that Binford and others (e.g., Bunn 1993; O'Connell et al. 1990) observe ethnoarchaeologically, or conform to models produced for assemblages of large mammals (Wheat 1972). Specifically, the discard of bones or partial dismemberment of a carcass to ease transport is likely irrelevant in the processing of small prey (Lupo and Schmitt 2005: 9). Thus, we cannot apply the same models for understanding the representation of skeletal parts to all faunal data.

Last, it is important to consider that hunting/foraging behavior does not necessarily exclude other modes of food procurement. Hunting behaviors tend to be overlooked in analyses of subsistence strategies associated with larger, more sedentary populations, with a heavy focus on agriculture and animal husbandry. The intensity of wild faunal exploitation is not likely to be similar in mobile versus sedentary communities, and likewise the reliance on cultivated agricultural products will affect hunting behavioral practices as well. That is, wild animals may have been exploited for

food, even when domestic herds were available, and/or cultivars were grown. I submit that it is important to consider the relationships between farmed, gathered, hunted and reared food items – as a social or solitary behavior, hunting provides a different contribution to both social and subsistence needs, and involves different strategies and cultural logic.

Pastoralism

The subsistence mode termed "pastoralism" includes a diverse variety of lifeways. Spooner (1973:1) defines pastoralism as direct or indirect subsistence from the products of domesticated animals, while Khazanov (1994: 19-23) suggests numerous forms, ranging from nomadic to semi-agricultural modes. In broad strokes, all of these strategies encompass the overlap between livestock rearing and some degree of spatial mobility (Dyson-Hudson 1972:23 – 24). Mobility is a central component of pastoralist lifeways, as pasture lands that are used for a prolonged period of time will degrade if not left to regenerate; in addition, the movement of herds throughout a landscape can support a larger number of animals than could be accommodated by a single territory. Pastoralism should be understood as both an economic orientation and a way of life, predicated on varying degrees of mobility, flexibility, and relationships with agricultural producers (Spooner 1975:173).

Pastoral economies are of particular interest to anthropologists, as the success of the herd is vital to the livelihood of the herders (Clutton-Brock 1989; Spooner 1975). Ethnographic and ethnoarchaeological studies have demonstrated the intimate and complex relationships between herders and their animals, as well as the numerous factors

that contribute to migration and herd management (Kuznar 1995; Khazanov 1994; Cribb 1984). East African "specialized" pastoralists, for example, rely exclusively on animal products despite an abundance of available wild game. As such, agriculture, gathering, and hunting are not pursued; however, various exchange systems between pastoralists and hunters and/or agriculturalists may be central to making this type of specialization tenable (Marshall 1990).

Similarly, scholars have posited that pastoralism encompasses a range of food-producing strategies, which were important components of past village economies (Murty 1992; Possehl 1979; Possehl and Kennedy 1979) and had significant impact on animal populations and local ecologies (Khazanov 1994). For example, with the decline of Indus Civilization urbanism in 3rd millennium (BCE) South Asia, the keeping of pastoral herds, in combination with dry and irrigated agriculture, may have been an important means of managing risk otherwise associated with more specialized subsistence regimes (Rissman 1989, 1986). In addition, an increasingly pastoral-component to Bronze Age lifeways would have created settlement patterns that included both sedentary and seasonal pastoral camps, the latter may have been largely invisible to archaeological surveys and served to further erroneous narratives of an Indus Civilization "collapse" (Possehl 1999; Possehl and Raval 1989). Indeed, faunal evidence from the Adamgarh rockshelter in Central India suggests that that pastoral stock-breeding was an important component of South Asian subsistence economies beginning as early as the mid-sixth millennium BCE (Rissman 1989:18; Allchin 1972: 117).

Pastoralist economies tend to be associated with the use of secondary products, which include dairy products (Ryan 2002), dung (Anderson and Ertug-Yaras 1998; Miller and Smart 1984), blood, hair/wool (Ryder 1981), and traction labor (Bartosiewicz et al. 1997). These are by-products that can be enjoyed without killing the animal, and may become important in contexts where live animals denote wealth, preserve livelihood and contribute to subsistence needs. In fact, Bogucki (1993) has argued a connection between draught cattle labor and the emergence of social differentiation and resource accumulation during the European Neolithic. Ethnographic observations suggest that the cattle pastoralists rarely slaughter their animals because they are highly valued as live animals; events (rituals, feasts) or seasons of resource scarcity may be marked with the slaughter and consumption of cattle, while smaller herd animals (such as sheep and goat) are killed and consumed with more frequency and less formality (Dyson-Hudson and Dyson-Hudson 1970:110; Evans-Pritchard 1940:26).

Reliance on animal products implies both an intimate understandings of animal behavior and physiology, in addition to long periods of selective breeding. For example, inducing a milk-reflex in cows in the absence of offspring (or for non-related offspring) can only be accomplished given extreme familiarity between an animal and her herder (Ryan 2002). Rearing domesticates for secondary products also results in the transformation of animal phenotypes, as wool-producing animals have reduced hair diameter, which enhances their coat. This trait must have resulted from a long period of selective breeding (Davis 1987:155-6; Ryder 1981).

Zooarchaeologists identify pastoral economies in a number of ways, most often through an examination of species frequencies and mortality profiles. Marshall (1990), for example, is able to present an argument for the emergence of specialized pastoralism in East Africa by contrasting a high biomass of wild animals in the region with a very low occurrence of these species in the archaeological assemblage. Furthermore, animals used for milk and wool production will be slaughtered at a later age, while a meat economy will tend to maximize meat returns by slaughtering an animal near the end of its immaturity (Davis 1987:157). Thus, age at death determinations may indicate culling of animals to "maximize" meat production in young males[11], while females may be allowed to age for use in dairying (Marshall 1990; Hesse 1984). Davis (1984), for example, uses mortality profile data to suggest that caprid milk production may have began in Western Iran as early as the fourth millennium B.C.. Rissman (1986) has shown the utility of analyzing patterns of annular cementum rings to determine the seasonality of slaughter and occupation of pastoralist sites in Western India; he observes a sharp cluster in the slaughter schedule that indicates a marked season of death for the cattle in the assemblage coinciding with the seasonal occupation of these campsites.

Labor-induced pathologies on weight-bearing elements may serve as evidence of traction labor in cows or buffalos (Johannsen 2004; Bartosiewicz et al. 1997; Higham et al. 1981); iconographic representations of draft animals and excavation of plough marks on agricultural fields are also evidence for traction (Davis 1987: 163 - 4). Beginning at two years of age, both male and female cattle are potentially useful as draught animals

[11] This age will very depending on the species in question. In general, maximum weight is attained in cattle after 48 months, and after 18 months in goats (Marshall 1990: 881).

(Johannsen 2004: 46). Draught cattle can be easily trained, such that they may not necessarily be kept until old age; an ox may be used for draught and then killed at a young age, when its meat quality is still high (ibid: 47). Thus, draught cattle may be "invisible" in a mortality pattern that apparently indicates an emphasis on meat production. Cows may also be kept for labor because they are more versatile than males, though draught work has been observed to have a negative effect on milk production (Lawrence and Pearson 2002: 105). Johannsen (2004: 47) argues that we cannot expect draught labor to be manifest in one particular type of mortality pattern.

Some archaeologists have admonished researchers for overlooking pastoral groups, and show how pastoral activities might be detected archaeologically (Shahack-Gross et al. 2003; Chang and Koster 1986). Specifically, Chang and Koster (1986) suggests numerous non-faunal indications of pastoral lifeways such as the presence of pens or corrals at sites and use of phosphate analysis to identify animal dung accumulations in archaeological deposits; similarly Allchin (1963) invokes ethnographic observations and historic records of Indian pastoralists to explain the accumulation of dung used to create the Utnur and Piklihal ashmounds during the South Indian Neolithic period. Davis (1984) infers processing and consumption of dairy products through ceramics similar to those used in the Middle East to hold and/or ferment milk. Residue studies on archaeological ceramics provide a valuable avenue of research that may contribute to the knowledge of the use and consumption of dairy products (see Charters et al. 1993).

Agricultural production

Agricultural intensification and production is often associated with "complex" societies, sometimes described as "urban" (Childe 1950), because it is a productive mode assumed to be predicated on sedentism, long-term cultivation of land, and a relatively high labor investment. Agriculturalists are conceptualized as specialized producers, and the resulting division of labor has been invoked as an indicator of social complexity and inequality, as economic and productive specialization demands skill and knowledge as well as the exchange of commodities and goods between producers (Durkheim 1933). Archaeologists have focused on specialized production as a process intimately linked with social differentiation, often associated with the centralized authority of urban, or state-level, systems (Wright 1977; Childe 1950).

Many researchers have suggested that as animal husbandry strategies shift in response to specialized economies, individuals may be less likely to engage in subsistence production and more likely to receive subsistence resources through specialized and regulated channels (Redding 1992; Crabtree 1990:157; Wapnish and Hesse 1991; Zeder 1984, 1988). As the distribution of an item becomes more specialized and highly regulated, consumers may become increasingly removed from its production. As such, these societies may be characterized by differentiation both between and within economic activities (Zeder 1988). Part and parcel with specialized production is exchange, where materials are distributed across space. Exchange can be conceptualized as part of building coalitions, legitimating and forming social obligations between and among groups (e.g., Mauss 1954). In considering the interrelationships between various

groups, it is important to remember that interaction does not oblige integration; I argue here that subsistence specialization is thus one potential axis of social distinction.

Zooarchaeologists have relied upon animal mortality profiles to identify shifts in husbandry strategies as individuals respond to changing distributive networks, demand, or ecological pressures (Zeder 1988; Redding 1984). For example, Zeder's work at Malyan (1988, 1984) has established a model for understanding specialized exchange of animal products. She argues that standardized butchering marks, lack of variation in part distribution and age at death, as well as low species diversity, suggest indirect (as opposed to direct) exchange between herders and consumers. Thus, she argues, as a large proportion of inhabitants become removed from herd resource production, distribution of meat becomes a specialized activity under centralized, adminstrative control. Similarly, Frey and Marean (1999), use both mortality profiles and body part distribution data to suggest that inhabitants of the urban Iron Age site of 'Ain Dara, Syria did not have access to the best cuts of meat, and consumed less valuable and desirable portions. While these models have proven useful in the Near East, where they were developed and applied, they are not directly applicable to all archaeological contexts. In addition, concepts such as 'value' and 'specialization' are not fixed, but will vary in culturally-specific contexts (see *Social Distinctions* below).

Some scholars have attempted to broaden the characterization of agricultural production by suggesting that agriculturalists did not exclude other modes of food procurement. While the frequency and modes of hunting may change with increased reliance on domesticated plants and animals, it is unlikely to be eliminated from the

subsistence repertoire completely. For example, Szuter (1994, 1991) discusses the important interconnections between animal communities and anthropogenic environments, suggesting that land modification by farmers creates or destroys animal habitats. She draws upon Linares' (1976) model of "garden hunting" – the capture of animals associated with cultivated fields – to suggest integrated modes of subsistence (also Kent 1989). In many cases, agriculturalists sought to rid their fields of small animals, and these animals' role as food may have simply been another benefit to a necessary process. Given these insights, archaeologists studying subsistence in the Southwestern United States have used the relative abundance of rabbits to deer (*lagomorphic to artiodactyl* index) in a faunal assemblage as a proxy for sedentism (rabbits inhabit agricultural fields) versus reliance on hunted game (deer live in forested, "undeveloped" land). Often, these analyses indicate concurrent shifting, procurement strategies, rather than strictly specialized agricultural production (Neusius 1996; Szuter 1994, 1991).

3.3 Social Distinctions, Consumption Patterns and a Brief Critique of Zooarchaeology

As previously discussed, subsistence practices can be considered an important aspect of social differentiation. Moreover, subsistence is interwoven with both the production and consumption of these products, which may also speak to aspects of social distinction. Here, I present previous research on consumption patterns in an effort to create a broad understanding of how such practices relate to axes of social distinction,

and how such dimensions of difference can be elucidated through archaeological data. In order to appreciate distinctions between patterns of food consumption, we must consider both the economic and symbolic content of the items differentially consumed (Jackson and Scott 1995:105). That is to say, animals or parts of animals may be imbued with value among many culturally-specific dimensions.

For example, ethnographic accounts discuss 'totems' as "emblems" of a social group (Durkheim 1912:104). These animals (or plants) are placed into human social categories, attributed with certain human-like qualities, and influence social relations in myriad ways (Descola 1996: 94; Levi-Strauss 1962). Indeed, Levi-Strauss (1962) theorized a direct link between animals and axes of distinction, stating that humans "... use the diversity of species as conceptual support for social differentiation" (101). Durkheim (1995) goes further to suggest that totems are not just worn on the body, but become part of the individual, arguing that "this mode of representation is in fact, and by far, the most important one" (114). In addition, totemic identity often influences which animals are consumed as food as well as how they are killed (Ingold 2000; Descola 1996). Drawing upon such insights, I discuss the importance of recognizing that animals must be considered integral components of society, rather than conceptualized solely in terms of an exploited resource, and consider possible "symbolic" meanings of animals that serve to influence patterns of animal use over space and time.

Consumption Patterns and Social Differentiation

While eating and drinking are basic biological necessities, the acts of eating or drinking are never simply biological acts. Instead, food and drink are consumed through

culturally patterned techniques that express identity and difference; food itself is an integral part of social life. This relationship has been well documented by anthropological research on food consumption (i.e., Dietler and Hayden 2001; Mintz 1997; Goody 1982). It is clear that food, and animals used for food, may have symbolic value or meaning related to religious or ideological beliefs, or the relative rarity of these animals themselves. Thus, 'value' is not fixed, but should be expected to change over time and space (Ervynck et al. 2003; Milner & Miracle 2002: 2). When we consider eating as a socially-imbedded experience shaped by cultural logic, we must examine the social aspects of consumption. These include the following dimensions: what is eaten, how it is prepared, where, when and in what circumstances it is consumed, how it is served, and who shares in the meal (Grant 2002:17)? Furthermore, food could be considered to constitute both economic and symbolic capital (*sensu* Bourdieu 1990).

Acts associated with consumption should be considered both socially divisive experiences – in which axes of status, gender or kinship may be highlighted – and cohesive events – through which communal consumption emphasizes cooperation or alliances. These aspects should not be considered mutually exclusive: "… nearly all feasts actually serve in some ways to define social boundaries while simultaneously creating a sense of community" (Dietler 2001: 88). Such insights have been provided by research on such communal consumption events, which have offered much-needed perspectives on the social dimensions of food (Dietler and Hayden 2001 [eds.]).

Cultural anthropologists have long recognized the complex roles of animals and food in human social life. From Durkheim (1995), Douglas (1966) and Levi-Strauss

(1962, 1973) to, more recently, Ingold (2000, 1988), Mullin (1999), Counihan and van Esterik (1997) and Keane (1997), many scholars have focused on the social meanings of animals. Specific creatures may be prohibited from consumption (Jha 2002; Simoons 1994), or encouraged under certain circumstances (Rappaport 1967). Animals may be prized for their rarity, beauty, or valued as wealth. Certain animals are imbued with symbolic meanings, as Jha (2002) and Robbins (1998) demonstrate for cows in South Asia, and Miller and Burger (1995) for llamas in the Andes. The presence of rare animals, or the presence of certain animals in a distinct context (in the case of interments, for example), can also denote symbolic meaning. In addition, processes of ritual dismemberment, meat distribution and consumption could all bear ideological, as well as economic, weight.

Because much of the archaeological record consists of food waste, these data are poised to inform on the ways in which social differences relate to consumption practices (Grant 2002; Milner and Miracle 2002; Russell 1999; Marshall 1993). Arguably more precise indications of consumption practices at the individual level may be found through trace element analysis in human bone (Barabar and de la Rua 1997; Hastorf 1991); however, these data are not always available or desirable. In contrast, animal bones are ubiquitous at many archaeological sites, and zooarchaeologists have proven that axes of social distinctions are detectable through archaeological food residues. Many scholars have demonstrated diverse relationships between food and status, power, gender, occupation, and religious affiliation.

So-called "elite" diets have been distinguished from common consumption patterns through an identification of "luxury" or highly valued food items. Ervynck et al. (2003) suggest that "luxury" foods are special items not generally available to most members of society; of course these traits are context specific, as foods considered luxury items will change over both space and time. However, these foods are rare, highly valued, and often associated with high social status. Because of the historically contingent nature of the value associated with these foods, there is some contention over how to identify luxury items in the archaeological record. Jackson and Scott (1995) suggest that high faunal diversity is a marker of "elite" diets in the Southeastern United States, while communal remains are likely to be characterized by low taxonomic diversity, be comprised of high-yield species, and bear evidence for bulk butchering. In contrast, Kirch and Jones O'Day (2003), observe that Polynesian common refuse tends to be generalized and opportunistic (i.e., more diverse), while elite middens contain primarily birds, fish and pig. While the distinction of "elites" from commoners can be problematic, there is utility in recognizing the need to contextualize identifiable dietary differences in order to reveal possible meanings and the cultural logic of such practices.

Furthermore, faunal remains have been shown to provide direct evidence of meat provisioning or differential access to food resources. As mentioned, exchange of animal products may be linked to increasing urbanism and centralized control (Zeder 1988, 1984). Moreover, occupants of certain 'neighborhoods' may consume less desirable or valuable portions of meat (Frey and Marean 1999), and such differences may relate to spatial divisions based upon class or ethnic distinctions. Further, food prohibitions,

methods of dismemberment, and preparation methods are also linked with what some scholars have described as ethnic or religious identities (Chase in press; Crabtree 1990; Hesse 1995; Klenck 1995).

Communal aspects of consumption can sometimes be identified through faunal remains. Refitting methods used to track the distribution of an animal's carcass may indicate food sharing practices and serve as testimony to social relationships between households (Zeder and Arter 1996). Furthermore, practices of distribution and exchange may bespeak social distinctions both within and among members of a community. Feasts are particularly interesting to archaeologists because these events have the pragmatic virtue of leaving archaeologically-recoverable material traces. Russell (1999) suggests that ritual feasting and roasting of meat produces charred and burned bones that can be identified archaeologically. She argues that small-scale household consumption, in contrast, would be in the form of stewed or slow-cooked meat that would produce an assemblage of intensively fragmented faunal materials. As areas of preparation will differ from refuse of consumption, evidence of feasting is not always clear-cut (Kelly 2001). Identifying specific feasting events, as well as developing a general understanding of the relationships between food and social life, demands careful contextual analysis of patterns of consumption, associated material culture, and spatial differentiation (i.e., Junker 2001; Kelly 2001; Dietler 1996).

A Brief Critique of Zooarchaeological Epistemology

I have argued that it is somewhat artificial to consider the "symbolic" nature of animals in human social life separately from questions of subsistence and consumption

practices because these are not discrete spheres, but interdigitated and recursive realms operating within a specific cultural logic. That is to say, the "meaning" or social value of an animal will necessarily influence who eats it, how it is procured, prepared, and disposed of. However, much of the research that is predicated on the identification and analysis of animal bones has tended to be focused on questions of economy, husbandry and subsistence, while less attention has been paid to social and ideological realms of human life (Milner and Miracle 2002:1; Grant 1989).

Gifford-Gonzales (1991:244) attributes this to the fact that zooarchaeological analysis exists within a physicalist-reductionist paradigm, which is strongly influenced by positivist, processual approaches. In such a framework, the relationships between humans and their environments are construed as adaptive and functional. As such, it is frequently presupposed in zooarchaeological interpretations that use of animals is consistent with a rational-economic framework, and the economic importance of an animal (or animal part) is correlated to its caloric value (Marshall and Pilgrim 1991; Harris 1985; Binford 1978; but see Marciniak 1999:306; Bartosiewicz 1997).

Optimal foraging theory, and adherence to functionalist paradigms discussed in the previous chapter, limit interpretations of animal-use to questions of economy and rational decision-making practices. Optimal foraging models characterize human subsistence efforts based on the costs and benefits of resource procurement (e.g., Smith and Winterhalder [eds] 1992; Hawkes and O'Connell 1981), arguing that human effort is directed at maximizing the rate of energy (most often measured as calories) captured. Hunting and culling strategies are often described in such terms, based on whether the

animal killed was of "prime age" for meat production (Speth 1983), and caloric value assigned to certain carcass portions (Outram and Rowley-Conwy 1998; Marshall and Pilgrim 1991; Binford 1978) are invoked to explain decision-making by consumers.

These approaches tend to perpetuate the Cartesian dichotomies of mind and body, function and form, and economic and symbolic realms of social life (Moore 1986: 88). While it would be foolish to jettison biologically-influenced facts of animal growth and development in discussing past patterns of animal use, relying solely on such tacit assumptions results in an overly simplistic understanding of the complex relationships that have existed between humans and animals throughout (pre)history. The consequence of these assumptions is that very little has been revealed about the relation of patterning in faunal assemblages to human behavior or beliefs (Hesse 1995: 197).

Ethnographic work (Keane 1997; Beavitt 1989) has demonstrated, contrary to the processual epistemologies driving faunal analyses, that the symbolic and economic realms of human life cannot be neatly separated, and human behavior is not wholly motivated by rational considerations. What is clear from anthropological accounts is the often polysemous and complex nature of human-animal relationships. While archaeologists are challenged to elaborate on the social dimensions of animal-use without the opportunity to observe them directly, ethnohistorical and historical texts have proven exceptionally useful in providing specific cultural information for interpreting patterns of faunal data in this regard (e.g., Kirch and Jones O'Day 2003; Jackson and Scott 1995; McGhee 1977).

Recently, zooarchaeological analyses have begun to broaden the scope through which animal-use is analyzed. For example, studies discussed how certain animals are preferentially consumed in ritual feasting (Crabtree 2002; Dietler and Hayden 2001), avoided as a result of food prohibitions (Hesse 1995:225 – 228), and included as part of burials and/or ritual interments (Hill 2000; Cruzeby et al. 1996). However, from an archaeological perspective, 'ritual' or 'religious' activities tend to be considered separately from domestic or economic realms. This may be an artificial distinction, as these spheres are inextricably tied. Grant (2002, 1989) suggests that zooarchaeologists should problematize the implicit distinctions between 'ritual' and 'ordinary' domestic refuse.

3.4 Human-Animal Relations in the South Indian Iron Age

Significant internal changes in economic, social and political organization in the South Indian Iron Age are attested to by long-distance trade, burgeoning centralized political organization, and megalith construction, for example (more details will be provided in the following chapter). Such changes may have been associated with corresponding shifts in realms of food production; for example, the introduction of foreign cultigens or animals, and the organization of craft production shifting to accommodate changing demand. In contrast, however, subsistence strategies are often strong local traditions, and are in a sense, resilient and perhaps resistant to change. Local subsistence practices must be geographically specific; that is to say, they are rooted in the demands and qualities of the local ecology, as well as specific cultural logics.

I argue that animals and animal products gain social meaning in the Iron Age through the interplay of historically-established local traditions and changing social dynamics. My research addresses the nature of the interconnectedness between local and extra-local influences by considering how economic, social and political transformations in South India are manifest in relationships between humans and animals during these periods. I address social distinctions by investigating consumption and subsistence practices as indicated through archaeological faunal remains.

As previously stated, animal-based subsistence strategies includes husbandry practices (such as culling strategies), exploitation of wild species through hunting, and use of animals for secondary products (such as dairy, dung or labor). These practices are best addressed by constructing mortality profiles and identifying labor-induced pathologies. Dietary emphasis on wild species such as fish, birds or amphibians is evident through measures of species diversity. However, species diversity or abundance in and of itself is not sufficient evidence to argue for hunting behavior as such. By integrating my findings with other lines of evidence (architecture, ceramics, botanical analyses), I infer patterns of animal use, which may suggest social and spatial distinctions at the site of Kadebakele.

I will also explore differences in consumption practices between structures and areas of the site. Consumption practices include the portions of animal consumed, methods of carcass dismemberment, and the cooking and processing of bones. Indices of these practices include burning, fragmentation, cut/butchery marks, and identification of body parts. I will record all of these qualities in an effort to address variations in

consumption practices, which are likely to relate to axes of social difference, such as religious affiliation, social class, occupation or gender. Moreover, animal use will vary in terms of animal identity, characters (age, sex, wild, domestic), and body parts utilized. Securely identifying these variables will allow me to address patterns of subsistence practices, and is contingent upon adequate comparative collections. Towards that end, I have created a comparative database for some taxa not represented in osteological collections in India (see Chapter 5).

Furthermore, given the emergence and dissemination of various religious traditions in the following Early Historic Period (Vedic Brahmanism/Hinduism, Buddhism, Jainism), and the accompanying dietary proscriptions of each tradition, I hope to address the possible influence of these religions in changing the economic and ideological significance of animals. For example, Smith's (1991: 527 – 528) study of Vedic texts suggests that animal taxonomies were invoked to justify class/caste ('varna') distinctions by reference to 'natural' divisions among the animal kingdom. He suggests that animals were either classified as 'domestic' ("village") or 'wild' ("jungle") in ancient Indian texts, the former being appropriate for consumption and sacrifice while the latter were not. Adherents to food prohibition practices have been documented from modern and historical times (Jha 2002; Simoons 1994), but these restrictions cannot be uncritically assumed to be relevant for the South Indian Iron Age. Furthermore, if such prohibitions were in place at the time, it would be naïve to expect widespread conformity to them. With these concerns in mind, my analysis tests the hypothesis that animal avoidance practices have contributed to the contents of an assemblage.

3.5 Chapter Summary

Here, I have discussed hunting, pastoralism and agricultural production as three distinctive, but interrelated, modes of animal production in an effort to emphasize the connections between subsistence practices and axes of differentiation. Several models have been presented for understanding patterns of faunal remains and the modes of subsistence such patterning evidences. Most importantly, it is crucial to conceptualize subsistence practices as interweaving, rather than mutually exclusive; that is, various methods of food procurement are likely to co-exist in a complementary fashion. Furthermore, though I have presented consumption patterns separately from subsistence, it is important to recognize that these are interdigitated aspects of animal use practices.

Consumption has been helpful in recognizing the social aspects of food, and food production. Feasts and food sharing behavior leave specific archaeological signatures that can speak to the cohesive and divisive nature of such events. The distribution of differentially valued portions of a carcass can also indicate differences in patterns of consumption, and therefore, axes of distinction. However, it is imperative to conceptualize 'value' within a specific cultural context, rather than adhering to models that rely solely on biological aspects of animal life, which extricate animals from the social realm in which they participate. As such, rational-economic and functional paradigms have provided numerous models of optimizing behavior, but often obfuscate the symbolic, social dimensions of animal use that have often result in so-called "irrational" behavior (e.g., Harris 1985: 47). A more holistic perspective will

contextualize animal use in a social milieu and cultural logic, thereby attending to the non-economic aspects of both subsistence and consumption.

The preceding discussion was intended to demonstrate that analyses of archaeological faunal data are a robust means of understanding subsistence and consumption practices, which in turn speak to avenues of social distinction. However, in the context of this discussion, I have emphasized that animals and animal products gain meaning in specific socio-historical contexts, and axes of differentiation can be expected to change over space and time. Finally, I have provided a brief discussion of my project in order to present my methods of ascertaining axes of social distinction from my dataset. However, a detailed discussion of the geographic and temporal focus of my research remains necessary.

In the following chapter, I review the Neolithic, Iron Age and Early Historic Periods in the Tungabhadra Valley, Karnataka, India. I summarize our current state of knowledge regarding these periods, what remains unclear about them, and discuss problems with prevailing models. I attempt to consider both the local dimensions of social life in the Tungabhadra Valley, as well as place this area in the broader context of the South India and the subcontinent. Furthermore, I highlight dimensions of socio-political relationships that may have had significant impact on social relations and animal use patterns in this region, as well as in South Asia more generally.

Chapter 4: Introduction to Time Periods and Summary of Previous Research

4.1 Introduction

Though not dissimilar to the history of research in most regions of the world, the archaeology of South India has been dominated by research programs that have emphasized archaeological cultures seated within culture-historic narratives (Johansen 2004; Morrison 1994). As such, the years between 3000 B.C. and A.D. 500 have traditionally been divided into three archaeographic periods: the Neolithic, Iron Age/Megalithic, and Early Historic. While the beginning, end and duration of each period vary according to researcher, the following periodization may be considered generally representative: South Indian Neolithic (3000 – 1000 B.C.), Iron Age (1000 – 300 B.C.), and Early Historic (300 B.C. – A.D. 500).

Much of the archaeological literature describes these aforementioned periods in terms of a 'culture or 'people', with the presence/absence of one or more material culture traits serving as diagnostic hallmarks. However, archaeological data have challenged the efficacy of such frameworks, as the material record of South India is marked by perduring artifact types that do not clearly delineate one period from the next. In fact, ample evidence for overlapping traditions emphasizes the fact that regional chronologies and local historical trajectories are unique and cannot be neatly explained by overarching chronologies and typologies (Miracle 2005; Possehl and Gullapalli 1999; Allchin and Allchin 1974; Wheeler 1947/48).

In this chapter, I discuss the enigma of the South Indian Iron Age (1000 – 300 B.C.), a period which is poorly understood in northern Karnataka, and currently lacks clear material signatures. Rather, it is characterized by apparent contrasts and similarities with the periods that precede and follow it. In other words, the material manifestations of South Indian Iron Age share many features with the earlier Neolithic and later Early Historic, while also containing notable absences. In fact, archaeography has more often defined the period according to negatives instead of positives. Therefore, any consideration of the Iron Age must necessarily include a review of both its surrounding periods. Despite the problematic nature of this periodization, much valuable information has been generated through decades of careful archaeological research in South India. The insights of this previous scholarship will be discussed here.

In this chapter, I briefly summarize the time periods relevant to my research at Kadebakele; specifically, I draw attention to the socio-cultural manifestations particular to the Southern Indian Neolithic, Iron Age, and Early Historic. I end each temporal summary with a presentation of subsistence strategies in an effort to highlight the extent and limits of our current knowledge regarding subsistence activities and animal use during these periods[12]. Furthermore, I briefly highlight the biases inherent in our perspectives on these time periods, and suggest how our understandings may be reconceptualized. First, I present a summary of previous research on the South Indian Neolithic Period, which is more clearly defined than the period it antecedes. Following

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[12] It is important to note that the frequency of non-mammalian taxa (birds, fish, reptiles) presented in this chapter is likely to be underrepresented by previous research due to variability in recovery methods (e.g., screening versus hand-recovery) and recording methods (e.g., noting presence or absence, versus providing NISP counts).

that, I will discuss the current state of knowledge regarding the South Indian Iron Age. Last, I present previous scholarship documenting the Early Historic period, which includes evidence from both textual/historical and archaeological datasets.

4.2 The Neolithic Period

Material culture recovered from Neolithic sites points to a profound change in socio-economy from the preceding Mesolithic, and suggests the emergence of a more settled lifestyle. While the term 'Neolithic' is arguably temporally imprecise, it may be used to describe archaeological assemblages that demonstrate evidence of permanent settlements and/or subsistence techniques requiring more labor input than hunting/gathering/fishing alone (Chakrabarti 1999:117; Allchin and Allchin 1982:117). The Neolithic in peninsular India is generally thought to begin in the first half of the 3rd millennium BCE (Korisettar et al. 2001; Paddayya 2001); Allchin and Allchin (1982:87) suggest that the transition to the Iron Age (see following section) occurs at 1000 B.C.. Black and Red Ware ceramics first appear in peninsular India in the late Neolithic period, and remain apparently ubiquitous for more than a millennium, as they are also found at Iron Age and Early Historic sites (Wheeler 1947/48). While many scholars posit that the so-called 'Megalithic' culture (associated with megalithic, often mortuary, monuments throughout peninsular India) succeeds the Neolithic in South India (Wheeler 1954, 1947/48), recent research suggests that the Megalithic complex is a burial (or monumental building) style that emerged during the late Neolithic period (Chakrabarti 1999:203; Devaraj et al. 1995; Allchin and Allchin 1982:341).

Strictly speaking, the term 'Neolithic' ("new stone age") does not appropriately describe this phase in Peninsular India; although rare and non-locally produced, copper, iron and gold have all been documented during this period (Devaraj et al. 1995; Shaffer 1989; Nagaraja Rao 1971: 89 – 91). Southern Neolithic sites are found in modern-day Karnataka, Andhra Pradesh and Tamil Nadu, with ashmound sites primarily located in the Raichur and Shorapur Doabs (see Figure 4.1). Ashmounds are prominent features of Southern Neolithic sites in the Doab regions; these are constructions of interstratified layers of burned and vitrified cow dung and soil, which first appear during the Neolithic Period and apparently cease to be constructed around 1500 BC (Sinopoli et al. 2002). Ashmounds have been interpreted as seasonal cattle pens (Fuller 2001; Fuller et al. 2001; Paddayya 1998; Allchin and Allchin 1982; Allchin 1963), pastoral refuse sites (Paddayya 1993), regional cattle-fair centers (Paddayya 1991/92), and as symbolic/sacred monuments (Sinopoli et al. 2002).

The nature of these ashmound features is not yet clear, despite a wealth of research, but all interpretations emphasize the importance of pastoralism in the economy of the area (Paddayya et al. 1995; Allchin and Allchin 1982:123; Paddayya 1973:76). B. Allchin and F. R. Allchin (1974) posit that ashmound locales may have been visited seasonally by migrating herders driving cattle herds to grazing lands when pasturage near settlement sites became scarce. They estimate that these Neolithic herds may have included upwards of 500 animals, and argue that the ashmound monuments served as storehouses for economically and ritually valued dung, as well as penned enclosures to protect the herd from wild carnivores at night.

In contradistinction to hilltop habitation sites which may have been occupied year-round (i.e., Devaraj et al. 1995; Paddayya et al. 1995; Shaffer 1989; Nagaraja Rao 1971; Ansari and Nagaraja Rao 1969; Thapar 1957), Fuller (2001; Fuller et al. 2001) argues that ashmounds were only seasonally used by (semi)nomadic pastoralists. He cites an apparent lack of grain-processing implements at some ashmound sites such as Utnur (Allchin 1963) and Kupgal[13] (Mujumdar and Rajaguru 1966) as evidence of such an interpretation. However a review of archaeological evidence reveals that ashmound sites such as Kupgal, Palavoy, and Budihal contain substantial occupational debris (Paddayya 1998, 1993), suggesting that the two should not a priori be treated independently of one another (Sinopoli et al. 2002).

Neolithic Subsistence Strategies

Neolithic residents of the Southern Deccan relied on mixed agro-pastoral subsistence regimes (Korisettar et al. 2001). Kajale's evidence from Northern Deccan sites (1991) and Fuller's analysis of Southern Deccan sites (2001) identified wheat, barley, lentil, pea, grass pea and gram as winter crops, and black gram, green gram, hyacinth bean, horse gram, kodo millet and pigeon pea as summer crops. Wild rice remains (*Oryza* sp.) were also identified in Neolithic deposits at Hallur (Fuller et al. 2001) and Koppal (Kajale 1997), while Watgal yielded evidence that local millets were domesticated in the Southern Deccan before wheat and barley were introduced from the North (Korisettar et al. 2001). African millets such as pearl, finger and sorghum millets were well-suited for the rain-fed, monsoon-based agriculture which became common

[13] However, I personally observed numerous rubbing stone and quern fragments when I visited the Kupgal ashmound in 2003.

practice during this time; these millets became staple crops during the latter part of the Southern Neolithic Period (1800 – 1000 B.C.) (Fuller 2003). In fact, Johansen (2004) and Sinopoli et al. (2002) have argued that sites from this period often occur near large topographic features where crop production could take advantage of seasonal runoff from surrounding hill slopes.

Karnataka lies in the main path of the south-west monsoon, which provides rain to the region for over five months per year (June – October); in the Northern Deccan, however, rainfall is generally low and often unpredictable. As a result, these areas are not well suited for winter cropping, but is more amenable to summer monsoon, rain-fed agriculture[14] (Korisettar and Rajaguru 2002: 272-3). Rivers in the Southern Deccan generally flow at their banks during the peak of the monsoon, so through the majority of the year, long stretches of fertile, alluvial beds remain exposed. Korisettar and Rajaguru (2002: 275-276) argue that such areas are especially suited for agriculture, and beginning in the Neolithic Period cultivation of these areas was commonplace. However, Morrison (2004:6) observes that Neolithic sites in peninsular India are not generally associated with the banks of major rivers, although they are sometimes located near minor streams. There is some suggestion that residences were located in specific geographical contexts in order to ensure access to run-off irrigation to meet watering needs of winter crops (for example, Tekkalakota, Kurugodu, Hattibelagallu, and Sanganakallu) (Morrison 2004: 6; Fuller et al. 2001: 79).

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[14] Paleoenvironmental data indicate that monsoon rainfall in peninsular India weakened beginning around 2500 BC, and the South Indian climate generally became drier and hotter by 1500 BC (Korrisetar and Ramesh 2002).

Previous discussions of Southern Neolithic lifeways have emphasized the use of cattle for meat, dairy, labor, and raw materials (dung, hide, bone, horn, etc.) (i.e., Paddayya 1973, 1991/1992, 1993, 1998; Allchin and Allchin 1974; Allchin 1963). This interpretation is buttressed by the observation that domestic cattle (*Bos indicus*) tend to predominate the faunal assemblages of Neolithic sites in Southern India (table 4.1, Figure 4.2). In addition, Alur (1971, 1968) has identified anchylosis and exostosis pathologies on cattle limb bones at Sanganakallu, Utnur, Pallavoy and Hallur consistent with use for drought labor and other weight bearing activities. The presence of aged animals in assemblages at Veerapuram and Ramapuram also suggests use of cattle for dairying[15] (Thomas 1989).

Site	wild mammals[16]	wild other	domesticates	Cattle
Tekkalakota	19	1	present	Abundant
Veerapuram	51	present	19	168
Kodekal	10	5	13	104
VMS 110[17]	7	0	16	24
Mallur	0	0	0	4
Kannekolur	0	0	2	16
Budihal	0	0	0	39
Tirth	0	0	1	6
Nevasa III	10	1	44	95
Inamgaon	44	7	136	570
Hallur	13	0	10	296
Utnur	Present	0	present	208
Palavoy	2	0	42	283

[15] There is no direct evidence for dairying until the 7th/8th centuries AD, where the act of milking a cow is depicted in stone relief at Mahabalipuram (Zeuner 1963).
[16] For all tables presented in this chapter, the following animals are included under these headings. *Wild mammals* include wild dog, wild ass, wild cats, wild pig, Panther/Leopard, Indian Fox, Chital, Nilgai, Sambar, Muntjac, Gaur, Blackbuck, Indian gazelle, Indian Hare, Indian Porcupine, and Rat. *Wild other* (non-mammals) refers to birds, fish, turtles, crocodiles, snakes and amphibians (also see Appendix I). *Domesticates* include Donkey, Horse, Goat, Sheep, domestic dog, and domestic pig. *Cattle* include both zebu and water buffalo specimens, given the difficulty in differentiating between the skeletal elements of these two species (e.g., Korrisettar et al. 2001; Kijngam 1979).
[17] The fauna collected from VMS 110 were from screened contexts.

Brahmagiri	10	0	32	303
Nagarjunakonda	Present	0	present	Abundant
Cuddapah	11	2	24	99
Kurnool	29	105	0	0

Table 4.1: NISP values of various taxonomic categories for Neolithic sites in peninsular India. Compiled using Monahan in press, Miracle 2005, Venkatasubbaiah et al. 1992, Thomas 1984, Clason 1975, Alur 1971, Nath 1968, Nagaraja Rao 1965, and Allchin 1963.

Furthermore, there is some genetic evidence that South India may have been an independent center of cattle domestication during the Neolithic period: a study of blood group factors and hemoglobin variants between several breeds of contemporary Indian zebu and those of Western origin support a separate ancestry (Naik 1978; Naik et al. 1969). These data support an earlier claim formulated on the basis of horn core morphology and relative size of specimens recovered from a number of South Indian Neolithic sites. Allchin (1963:45; 1961:62; 1960:12), Shah (1973) and Paddayya (1975) note "two breeds" of cattle remains at Pallavoy, Piklihal, Utnur and Kodekal: one was long-horned and slender, while the other was massively built. If cattle were domesticated independently in South India, zebu cattle did not descend from *Bos primigenius*, which gave rise to *Bos taurus* in Western Asia, but from the now-extinct *Bos namadicus* within South Asia itself. This matter is far from resolved, although these data suggest that South India should be considered as a center of domestication during the Neolithic Period.

Monahan (in press) provides a rebuttal of Fuller's (2001) functional interpretation of ashmound versus habitation sites, noting that faunal remains from Neolithic ashmounds and habitation sites do not differ significantly: remains of domesticated

animals such as sheep/goat, water buffalo, dog, pig, donkey, and cattle are present at both. Wild animals[18] are also present at both types of sites, but in smaller numbers than domesticates. It has been suggested that the importance of hunting was reduced following the Neolithic Period (Thomas and Joglekar 1994:197); however, this claim would be difficult to prove or disprove, as these predominantly unscreened assemblages are unlikely to contain skeletal materials from small mammals, reptiles, birds or fish. As it stands, there is no clear basis for comparison and a more accurate understanding of the animal economies of the Neolithic and subsequent periods remain to be developed. Recent work by Miracle (2005) demonstrated wild-resource exploitation in sporadically occupied Neolithic (and perhaps earlier) cave sites in the Kurnool District (Andhra Pradesh). Indeed, these assemblages are heavily dominated by wild taxa and stand in stark contrast to contemporaneous Neolithic habitation and ashmound sites; Miracle suggests that the cave assemblages provide evidence for use of these sites in the hunting/collecting of wild, forest resources and observes that cave visitors neither kept nor consumed domesticates at these sites during their visits.

Reconceptualizing the South Indian Neolithic

Our current understanding of Neolithic subsistence economies is limited for a number of reasons. First, there is contention regarding how Neolithic peoples of South India inhabited the land. That is, the "function" of ashmounds in contrast to habitation sites is a problematic distinction. As noted, archaeological research has produced

[18] Gaur (*Bos gaurus*), blackbuck (*Antilope cervicapra*), chital (*Axis axis*), nilgai (*Bosephalus tragocamelus*), barasingha (*Cervus duvauceli*), sambar (*Cervus unicolor*), gazelle (*Gazella gazelle*), porcupine (*Hystrix indica*), monitor lizard (*Varanus flavescens*) and rat/squirrel are mentioned in Chattopadhyaya (2002:385, 390) and Paddayya (1975).

evidence that many ashmounds were occupied for substantial periods of time (more than simply seasonally), and that "settlement areas" and activities must be considered integral to the ashmound site itself (Paddayya 1993:74). Furthermore, not all ashmounds and habitation sites are equal; while some exist in isolation, in other contexts, ashmounds are located in close proximity to substantial habitation deposits (Johansen 2004).

Part and parcel with disagreements over ashmound and habitation sites is the fact that discussions of Neolithic animal economies single-mindedly emphasize pastoralist lifeways. This is symptomatic of the inherent bias against smaller taxa resultant of the widely-practiced hand-collection method of archaeological specimen recovery. While it is somewhat safe to say that among larger bodied taxa, domestic cattle tend to predominate Neolithic assemblages, a more complete picture of animal-use can be developed with future, careful research. In particular, the variation between the Kurnool cave sites and other Neolithic faunal assemblages bespeak some variability in the extent to which wild versus domesticated resources were kept and consumed. While some wild taxa are present at most Neolithic habitation/ashmound sites, the overall low frequency in these loci suggest that wild, forest resources were not strongly integrated into daily subsistence regimes. Indeed, if the Kurnool cave site were, for example, used as hunting camps for Neolithic agropastoralists, the meats of wild animals tended to be consumed at the cave sites themselves. Alternatively, these cave deposits might represent contemporaneous forager groups that maintained distinctive lifeways separate from the agro-pastoralists nearby. More consistent recovery methods and detailed faunal analyses are needed to further investigate the variability of Neolithic faunal assemblages and

formulate possible patterns of discrimination or preference between wild and domestic fauna and possible interactions between inhabitants of these various sites.

As stated above, previous faunal studies of the Southern Neolithic sites have emphasized pastoralist lifeways. Given the current state of research, genetic markers provide much stronger evidence for independent domestication in South Asia (if not regionally within Southern India itself) than interpretations of osteological materials from archaeological sites. Indeed, identification of distinct breeds based on faunal materials themselves must be considered skeptically as issues of sexual dimorphism (Grigson 1982a), the growth-related effects of castration (e.g., Davis 2000), or closely-related species (such as between *Bos gaurus* and *Bos indicus*) (Bokonyi 1997, also see Chapter 5) are sufficiently complicating factors that such "breed" identifications cannot be clearly substantiated.

Instead, the osteological evidence of two "breeds" of South Indian Neolithic cattle may possibly be interpreted as the result of castration of male calves, which is known to delay the fusion of epiphyseal ends and result in longer and more slender long bones (Davis 2000; Grigson 1982a). Such a pattern is consistent with the reported presence of "heavy" versus "tall" specimens reported from Kodekal, Utnur, Pallavoy and Piklihal. This hypothesis will be further explored in Chapter 6, and I will argue that the practice of castration has numerous important implications for dimensions of human-animal relationships during the Neolithic, including management of animal populations, and selective breeding practices and preferences.

To briefly return to the aforementioned emphasis on the role of Northern India in shaping the trajectory of South Indian (pre)history, it is significant to reemphasize the possibility that zebu cattle were domesticated locally and independently during the Neolithic Period. These data (rightly) shift the focus towards the complexities and accomplishments of local communities, and away from the importance of long-distance contacts or migrations, in the (pre)history of southern India.

4.3 The Iron Age

As early as 1947, Wheeler's excavations at Brahmagiri revealed that its megalithic culture (or Iron Age) could not be discretely identified independently of the Neolithic and Andhra (Early Historic) strata (Wheeler 1954, 1947/48)[19]. The Iron Age in Southern India continues to be a mystery of sorts, and is less clearly defined than the following Early Historic and preceding Neolithic Periods. While a few materials are thought to be diagnostic of this time period, the Iron Age is often distinguished in terms of negative evidence. That is, this time period is described as lacking the aforementioned traits of the Early Historic Period – "urban" settlements, RCPW, and coinage (see below) – while Neolithic qualities persist and intensify: megalith building, Black and Red Ware pottery, and agro-pastoral subsistence strategies. Absence of written documents cannot serve as evidence that the religious traditions that characterize the Early Historic are absent or present during the Iron Age. We may only say that if such traditions were

[19] Morrison (in press) similarly notes that the 'Iron Age' cannot be distinguished in much of South India given the current state of research, as it has no diagnostic ceramic types and very few radiometric dates.

present they were, at best, disseminated through oral tradition before being textually codified decades, or centuries, later.

The Iron Age is roughly dated between the end of the second/beginning of the first millennium BC and 300 BC (Tripathi 2002), and is associated with the increase in iron smelting technology, iron use, continued use of Black and Red Ware ceramics, and building of megalithic stone monuments. Despite its moniker, the use of iron itself during this time does not distinguish this from earlier periods, as Possehl and Gullapalli (1999:159 – 161) indicate that knowledge of iron production has earlier roots – perhaps as early as the third millennium BC, in the northern part of subcontinent. However, it has been argued that iron technology was central to the process of clearing forest land and settling of much of the subcontinent, and served as an impetus to urbanization during the Iron Age and subsequent Early Historic Periods in Northern India (Tripathi 1999: 501; Sharma 1983). Lal (1984), however, observes no significant differences in implement forms between earlier Painted Grey Ware (Iron Age) and later Northern Black Polished Ware (Early Historic) sites in the Gangetic Plain, and argues that urbanization patterns cannot be explained solely by the development of iron technology in the northern subcontinent. In Southern India, there is some evidence for the intensification of iron production during this time period (Morrison 2004), though the earliest evidence of iron itself comes from the Neolithic-Iron Age site of Hallur (Nagaraja Rao 1971).

The earliest megaliths in South Asia date from the late second millennium and co-occur with the increasing consumption of iron (Possehl and Gullapalli 1999:158). Allchin and Allchin (1982:342) argue that megalith building in the subcontinent arose as a result

of contact with Central Asian peoples in the first and second millennia BC, while Leshnik (1974) suggests a later date (3^{rd} and 2^{nd} centuries B.C.) of contact with Western Asian and European megalith builders. More than 2000 megalithic (often mortuary) sites have been documented in the Indian peninsula; the distribution of sites is not limited to the peninsula, although they are less commonly found outside this area[20]. South Indian megalithic sites may contain anywhere from one to several thousand megalithic monuments (Mohanty and Selvakumar 2002; Brubaker 2000-1; Moorti 1994). These features are constructed from local stone and earth, and range in type from dolmens, menhirs and stone circles to cobble alignments and boulder-filled cracks in granite outcrops (Lycett and Morrison in prep). Very few megaliths have actually been excavated, and the majority of those which have are burials. There is a bias inherent in our knowledge about the Iron Age, as a paucity of data regarding associated habitation sites currently exists (Raman 1999). In fact, recent excavations at Watgal show that there is no discrete "Megalithic culture" in South India, and Devaraj et al. (1995) argue instead that the building of such monuments is a component of the Southern Neolithic. In addition, it is important to mention that megalith construction did not cease after 300 B.C.; it appears to have continued within the context of Early Historic urbanization, persisting into the first millennium AD in some areas (Rajan 1990).

The transition between the Neolithic and Iron Age in South Asia has been associated with the arrival of 'Aryan' invaders from Western or Central Asia (i.e., Leshnik 1975; Gururaja Rao 1972; Sastri 1955:74). Some scholars have attempted to

[20] Outside the peninsula, they are found scattered throughout northeastern South Asia, and are not usually interments.

associate Iron Age sites with places mentioned in the Mahabharata (Sharma 1983; Basham 1954). However, archaeological research challenges the concept of Indo-Aryans as a linguistic, ethnic and racial group responsible for shaping the South Asian past (Erdosy 1995; Shaffer 1984; Dales 1964), and has demonstrated the importance of regional distinctions in examining this phase of the South Asian past. There is little agreement on the precise nature of power relations during the South Indian Iron Age, but Moorti (1994) and Brubaker (2000-1) suggest that Iron Age communities in South India varied widely in scale and geographic extent, and were stratified, locally-oriented socio-political units.

Iron Age Subsistence Strategies

Those relying on the "Aryan invasion" theories explaining the transition to the Iron Age in Southern India argue that pastoral nomads from the Northwest brought the megalithic tradition into peninsular India. Based primarily on evidence in the form of interred horse remains and iron weapons, and an epistemological commitment to diffusion models of cultural change, this hypothesis does not do justice to the complexity of Iron Age archaeological data in peninsular India.

Systematic investigations of archaeobotanical remains from Iron Age sites in peninsular India have yielded rice, barley, wheat, kodo millet, grass pea, horse gram, black gram and lentil (Kajale 1997: 100). Sinopoli et al. (2002: 14) suggest that rice paddy agriculture first emerges on a large-scale in South India during the Iron Age; this type of agricultural requires relatively complicated hydraulic control, and results in the substantial transformation of irrigable, low-lying areas. In contrast to earlier Neolithic

settlements, settlements in the Tungabhadra corridor begin to cluster along the banks of the river beginning in this period (Morrison 2004:6). These larger, more permanent settlements may have resulted in localized soil erosion and deforestation, and larger-scale iron ore exploitation of the granitic Daroji Hills may have contributed to significant soil loss.

Research has indicated that the South Indian Iron Age subsistence economy likely resembled the agro-pastoralism attributed to Neolithic times (Table 4.3, Figure 4.2). Studies have identified a similar range of domestic and wild animals, again with cattle predominating (Thomas 1992a; Deo 1985:450). Like Neolithic sites, there is the suggestion that two distinct breeds of cattle (tall versus massive) were present during the Iron Age as well (Alur 1971: 120). However, data suggest slight shifts in animal use strategies taking place throughout the peninsula during the Iron Age perhaps reflecting a more diverse subsistence base (A. Bauer et al. in review; R. Bauer et al. 2004). For example, the site of Bhagimohari (Maharashtra) (Thomas 1993, 1992a) illustrates a diversifying economy where wild animals apparently constitute about 25% of the faunal assemblage. Here, Thomas notes that birds make up nearly 20% of the identified bones; only large birds such as crane, goose and fowl were identified at Bhagimohari, and two specimens from turtle species were also noted from this excavation.

In addition, Miracle (2005) notes the continued dominance of wild taxa within rockshelter deposits in the Kurnool District. The constituents of these assemblages differ from Neolithic deposits in the region only in their local (in rockshelters, rather than caves) and the presence of three domestic specimens. Occupation of these sites appears to

be sporadic, and may reflect seasonal or otherwise occasional use of these areas for the express purpose of procuring wild taxa. Whether the observed faunal diversity at Kurnool and Bhagimohari are unique or simply the result of the poor recovery methods that characterize most excavations in Southern India can only be determined with further systematic research.

Sites	wild mammal	wild other	domesticates	cattle
Veerapuram	42	present	112	383
Halur II	4	2	22	536
Nevasa	40	2	62	271
Palavoy	0	0	3	61
Brahmagiri	4	1	42	151
Bhagimohari	28	113	147	259
Kurnool	133	0	3	0

Table 4.2 NISP values of various taxonomic categories for Iron Age sites in peninsular India. Compiled using data presented in Miracle 2005, Thomas 1983, 1984, Clason 1975, Alur 1971, Nath 1968.

In addition, the presence of horse during this period is notable, as this animal first establishes widespread presence in the peninsula during the Iron Age[21]. Anthony and Brown (Brown and Anthony 1998; Anthony and Brown 1991, 1989; Anthony 1991, 1986) suggest that the domestication of horses and the practice of horseback riding revolutionized social life "by permitting rapid transport, scouting for pastures, mobile herding, and long-distance trading and raiding ventures" (Anthony 1991: 204). In addition, horses could also have been consumed for their meat. Stories about "horse sacrifices" pervade discussions of the Iron Age for many reasons; these ritual killings are alluded to in Vedic texts (*asvamedha*) and are purportedly evidenced at the site of Raipur

[21] Horses (*Equus caballus*) are not native to the Indian subcontinent, and were believed to have been initially domesticated in the Eurasian steppes (Anthony 1991, 1986).

(Thomas 1992b). In fact, Thomas (1989:110) observes that horses are almost always the only animals buried in megalithic interments; the only exception was discovered at Naikund, where a cow was interred instead.

Reconceptualizing the South Indian Iron Age

This review of the current state of knowledge regarding the Iron Age or 'Megalithic' complex of Southern India demonstrates that the period itself is something of an enigma, as many scholars have struggled to define it chronologically and examine it materially. Our current understanding of the Iron Age in Southern India (and South Asia as a whole) is symptomatic of the tendency to the treat peninsular India as a monolithic cultural entity, which has resulted in inadequate chronologies and lack of systematic regional research. Previously relied-upon diffusionist models of cultural contact do not explicate the dynamics of the Iron Age; in addition, theoretical frameworks that link material culture with biological relationships still pervade historiographies of the South Asian Iron Age. These models invoke narratives of 'horse-riding (Central Asian Aryan) nomads' as agents of cultural change, whose influence results in the amalgamation of material traits that characterize the South Indian Iron Age. In an effort to decouple archaeological evidence from these stories, we cannot assume that the remains of a horse itself have ideological significance. That is to say, not all dead horses are sacrificial victims or vehicles of Aryans.

Similarly, the tendency to treat the "megaliths" as material markers of specific cultural identities precludes adequate treatment of the time period; chronologies and

typologies of the megaliths themselves (e.g., Sundara 1989, 1974) have yielded limited success. As Possehl and Gullapalli (1999) have argued, the Iron Age in South Asia is regional in character. As such, we must consider the distinct and local nature of political, ecological and economic aspects of various regions, which in turn, produce unique historical trajectories. Systematic research on the South Indian Iron Age will broaden our perspective of this time beyond these mortuary monuments, which importantly, are not uniquely an "Iron Age" phenomenon. They must be considered part of the tapestry of Neolithic and Early Historic South India, and our focus must shift to integrate the dynamic worlds of the living with those monuments erected to the deceased.

4.4 The Early Historic Period

The Early Historic Period was a time of dynamic sociopolitical, ideological and economic change in the Indian subcontinent. The majority of archaeological and historical information about this period are derived from the northern portion of the subcontinent, rather than peninsular India. While dates for this period vary slightly (Razcek and Sugandhi 2004), for heuristic purposes it will be useful to refer to the co-occurring features described by Allchin and Allchin (1982:321) as typifying this time. These traits emerge around 300 BC and persist until approximately 500 AD, and include heavy use of iron, presence of cast copper and punch-marked coins, baked brick, appearance of cities and fortifications (Erdosy 1988), Northern Black Polished Ware

(NBPW, primarily in the northern subcontinent), continued presence of Painted Grey Ware (in the northern subcontinent), Black and Red Ware (in peninsular India), and Russet-Coated Painted Ware (RCPW, also in peninsular India). Furthermore, in Northern India, the Early Historic is concurrent with the establishment of the 16 *mahajanpadas* (regional governments) mentioned in early Buddhist literature (Ghosh 1989:130).

Sociopolitically, the Early Historic was an important time. It was during this period that the first expansive polity in South Asia, the Mauryan Empire, grew to its largest size, encompassing much of India's modern borders. While the Mauryan capital was in the Gangetic Plain, its influence in the peninsular regions is attested to by the Asokan inscriptions at sites of Brahmagiri, Siddapur, Sannati, Koppal, Nittur, Udegolam, and Maski (Allchin 1995; Erdosy 1988, see Figure 4.1). According to Thapar (1997), these rock inscriptions were edicts declaring the Emperor Asoka's acceptance of Buddhism and policy of social responsibility (*dharma*). Furthermore, the placement of these edicts in Southern India suggests political connections between this region and larger political structures (ibid). However, it is important to note that the presence of edicts in peninsular India does not indicate that this area was incorporated into the Mauryan Empire. Sugandhi (2003) notes that archaeological sites of the Southern Deccan lack distinctive Mauryan material culture (coins, art-forms, ceramic types); she suggests that the edicts simply serve as a claim of influence in the region, rather than an actual reflection of political control. Interestingly, she also notes that the inscriptions are written in the Prakrit dialect of Magadhi, which is often assumed to be the administrative language of the Mauryan polity. In the south, where people presumably communicated

using a Dravidian language, the edicts would not have been comprehensible to the local community without intervention.

Further south on the Indian peninsula, many smaller polities came into being during the Early Historic Period. Indeed, one of the Ashokan edicts makes mention of five independent states that presumably existed beyond the borders of the empire: Choda (Chola), Pandya, Satiyaputra, Keralaputras (Chera), and Tamraparni (in Sri Lanka). Abraham (2003: 212) suggests this reference indicates that the polities of Kerala, Tamil Nadu, and Sri Lanka were not incorporated into the Mauryan realm. The Satavahanas also wielded influence over the Deccan and Andhra Pradesh, becoming influential in the region during the 1st century BC, and ruling the central portion of India until the second century A.D. (Sinopoli 2001; Ghosh 1989:147; Sastri 1955).

The Early Historic was also a time when institutionalized religions[22] (Buddhism, Jainism, and Brahmanism/Hinduism) were codified through textual traditions and associations with wider social networks, such as merchant routes, temples and Mauryan policy. The influence of these religions in Peninsular India is suggested by monuments such as Sannathi (northern Karnataka), which was an important Buddhist monastic center by the 1st century AD (Ray 1994; Heitzman 1984). Champakalakshmi (1996) suggests that Jain traders and religious complexes were present in the peninsula during this time, while Brahmanical practices are attested to in Tamil Sangam and Vedic Literatures (Thapar 1995, 1984; Ray 1986: 11). Additionally, there is some evidence for conflict between some of these religious traditions, particularly between Buddhists and Brahmins,

[22] By 'institutionalized', I am referring to codified practices part of a structured, widely-established system of beliefs.

during the Early Historic Period (Thapar 1997:4; Simoons 1994:142-3; Erdosy 1988; Tambiah 1976); in fact, are typically described these as 'heterodox' religious traditions.

From an economic perspective, the Early Historic Period provides a wealth of evidence for long-distance trade both within the Indian subcontinent and overseas. The spread of NBPW in particular is thought to reflect the dissemination of traders and missionaries from the North to peninsular India (Ghosh 1989:150). India's western peninsula has valuable mineral deposits (agate, carnelian, and chalcedony, for example), and Ray (1989:104) notes that both the Pali texts and the Arthasastra show familiarity with such resources. Furthermore, many scholars have postulated a close association between the spread of Buddhism and the development of long-distance exchange (Champakalakshmi 1996; Ray 1994; Heitzman 1984). However, despite Buddhist institutions' proximity to trade routes, they should not be thought of as having a direct role in long-distance exchange; rather, because monasteries were unlikely to be self-sufficient, monks should be considered as consumers, rather than producers, of agricultural and non-agricultural goods (Fogelin 2003; Morrison 1995). In overseas exchange, southern seaports were an important part of South Asia's socio-economic relations with Southeast Asia, Southwest Asia and Roman Egypt (Champakalakshmi 1996; Gupta 1995/96) during the Early Historic Period. By the 4th century B.C., India was known in Greece as a land extremely rich in gold (Subramanian 1988: 30). Roman materials from coastal sites such as Arikamedu suggest that an important trade route existed overland between the west to east coast through the Palghat Pass (Abraham 2002; Ghosh 1989:151).

Historical Data

The advent of written records in the late centuries B.C. have allowed archaeologists and historians to move away from treating the entire Indian peninsula as a single unit, and instead consider regions separately which seemed to have distinctive historical trajectories. Modern-day Kerala and Tamil Nadu constitute the region known as Tamilakam, while the Gangetic Plain region to the north is documented as the urbanized capital of the Mauryan Kingdom. However, the Northern Deccan region (including modern-day Karnataka) does not have any historical records associated with it per se. Instead, we must cautiously examine the contemporaneous historical record for insights into the Tungabhadra Corridor and couple this with archaeological data from the region itself. Here, I discuss the various types of historical sources relevant to Early Historic Period in South Asia in general.

Briefly, however, it is important to discuss a few caveats related to the use of texts in developing understandings of Early Historic South Asia. First, one cannot assume that practice mirrors proscription; that is, political and religious texts do not tell us what individuals actually did. Towards this endeavor, archaeological data must be considered equally important in establishing an accurate picture of past lifeways. Second, the content of texts does not inform us on their spheres of political or ideological influence. That is to say, the extent to which these histories describe, or are relevant to, the Tungabhadra Corridor remains to be seen.

The Ashokan edicts, created in the 3rd century B.C., are among the earliest textual archaeological evidence found throughout the subcontinent (Ghosh 1989:131). These

edicts were either declarations of Ashoka's acceptance of Buddhism and relationship to a particular *Samgha* (temple), or they were definitions of Ashoka's policy of *dhamma* (social responsibility) (Thapar 1997: 4; Tambiah 1976). Another text associated with the Mauryan Empire is the *Arthasastra*, which was thought to have been composed slightly earlier (c. 320 B.C.) by the chief minister of Candragupta Maurya as a treatise on statecraft (Allchin 1995: 189; but see Trautmann 1971, who suggests that the *Arthasastra* was not finally compiled until the 3rd century A.D.). This is a prescriptive, rather than descriptive, text that informs regarding the organization of power and economic relationships within the empire.

Foreign texts serve as testimony to the fact that the Indian subcontinent was known overseas as an important trade center by the Early Historic Period. Herodotus (in 500 B.C.) is among the earliest to mention settlements in India, while Megasthenes (Greek ambassador to Candragupta Maurya) provides the earliest direct accounts (c. 320 B.C.) of western peninsular ports. Similarly, Han Period writings document trade between China and India during the 2nd century A.D.; specifically, Chinese silk and Indian pepper were often exported to Egypt from southwestern ports in India (Subramanian 1988: 27).

While political texts may inform about the economy, laws and policies of the centralized governments, religious documents codified during the Early Historic Period provide insight to different aspects of the social milieu. The central Jain text, the *Acarangasutra*, is thought to have been composed in the third century B.C., although the compilation of the Jaina Canon is generally dated to the early centuries A.D. (Thapar

1995: 110). The Buddhist cannon was also compiled during this time, during the latter part of the Early Historic Period (Rawlinson 1916: 22). It is unclear when Vedic writings, regarded as a central component of Hinduism and Brahamanical practices, were textually codified. While some scholars date the composition of the Rg Veda to the later half of the 2^{nd} millennium B.C., others argue that it was composed in the early 1^{st} millennium (Thapar 1995). These, and later Vedic traditions may have been transferred to writing as late as 400 B.C.. In contrast to popular epic literature (the Mahabharata and Ramayana, for example), Thapar (1995: 84) suggests that the Vedic compositions may have been more carefully preserved through oral tradition, because the mantras were regarded as special and powerful in their distinct forms. Therefore, the written forms of the Vedas may not be markedly different from those previously passed down orally during the Early Historic Period and before.

In South India (modern-day Kerala and Tamil Nadu more specifically), Tamil Sangam literature was composed to praise the military prowess of various Tamil rulers in their territorial exploits and demonstrations of power. This corpus is tenuously dated slightly later than the Vedic texts, to the first four centuries A.D.. The *Ettuttokai* (eight anthologies) and *Pattupattu* (ten idylls) are the two major groups of texts, and while there is uncertainty about the chronology of the literature, it thought that these poems were composed and then compiled into anthologies over a period of three to four centuries, some time between 300 B.C. and 300 A.D. (Gurukkal 1995: 240). Despite their poetic and courtly intentions, Abraham (2003, 2002) notes that these works also provide information about land use and subsistence practices. While these texts do not directly

discuss the Tungabhadra Corridor region, they may, as mentioned, shed important light on Early Historic lifeways in peninsular India, and perhaps on regional/local subsistence strategies.

Early Historic Subsistence Strategies

As mentioned, no clear description of Early Historic subsistence is provided by existing textual evidence. Rather, a picture of regional practices can be best discerned in broad strokes. The Rg Veda describes agro-pastoral lifeways, which may correspond with Iron Age and Early Historic settlements in the Indus River Valley. Later Vedic texts (Brahmanas, Aranyakas and Upanishads) reference a wider geographical distribution, including the Western Ganga plain and south along the banks of the Yamuna and Ganga Rivers (Thapar 1995: 96). Subsistence patterns certainly varied regionally, but these texts suggest a growing predominance of farming and preference for agricultural products over pastoralism and animal products throughout the northern subcontinent.

In ancient Tamilakam (modern day Kerala and Tamil Nadu), the *tinai* concept of the Tamil Sangam poems provides some insight into subsistence and social organization. The area is described as having five physiographic zones: *kurinci* (hilly backwoods), *palai* (parched zone), *mullai* (pastoral tract), *marutam* (wet land) and *neital* (the littoral) (Champakalakshmi 1996:97; Gurukkal 1995: 242). The Sangam corpus suggests that most people were involved in dry land agriculture and animal husbandry, rather that wetland farming. The poems also refer to groups of pastoralists in the region (Subramanian 1988: 85).

However, the term "pastoralism" as such may not be clearly understood in this context; that is, ethnographic studies of Near Eastern and Central Asian pastoralist groups cannot be assumed to apply here (i.e., Khazanov 1994; Spooner 1973; Dyson-Hudson 1972). In fact, Zvelebeil (1975) cites Tamil texts that reference millet cultivation by pastoral groups who return with their herds to villages at dusk, suggesting that these groups were not completely nomadic. This manner of village-based pastoralism likely occurs where agricultural labor is not paramount (in the case of non-irrigated crops, for example). In addition, animal herds may be split to facilitate care; while lactating females and their young are kept close to facilitate milking and care, older females and males can be herded beyond of the village boundaries.

More directly relevant to understanding Early Historic patterns of subsistence in the region are the results of previous archaeological research. These data suggest that Early Historic sites in South India include settlements, large and small 'megalithic' monuments, and rock art sites. Sites tend to be nucleated, and these locations may have facilitated the use of river water in farming; these patterns may reflect more intensive localized production during the period, perhaps involving large-scale rice agriculture (Morrison in press). Subsistence practices may have differed markedly during this time from the preceding Neolithic and Iron Age as local production expanded with the intensification of agricultural and husbandry economies. That is to say, the Early Historic Period did not see the introduction of new cultivars, but instead, was likely characterized by increased production of existing agricultural products (see "Neolithic Subsistence" above for details on these plants). The expansion of rice agriculture and its integration

with existing subsistence strategies likely stimulated complex, new agricultural regimes and land-use strategies.

Finally, it is important to review what previous studies of faunal materials recovered from Early Historic sites in peninsular India have revealed regarding patterns of animal use. A review of the publications available to date suggests that many analyses of fauna from Early Historic sites in South India primarily consist of species lists and element descriptions (e.g., Krishna Sastry 1983; Clason 1975; Nagaraja Rao 1971; Ansari and Nagaraja Rao 1969; Nath 1968) rather than precise contextual information. While data from these previous studies provide valuable information regarding species distribution and ubiquity throughout the region, there is a lack of information regarding sampling procedures which affect the recovery of smaller specimens, small mammals and non-mammalian orders. Thus, it is likely that the importance of small, wild taxa and hunting practices during this period has been systematically overlooked as a result of hand-collection practices, and in many ways, the data collected from these sites are incomparable to one another (Szuter 1994). Furthermore, it is difficult to make any deductions beyond generalizations regarding animal-use practices based on these types of data.

What can be stated is that animal use during the Early Historic tended to be more varied than in preceding periods with domestic cattle predominating, along with sheep/goat and buffalo in lesser numbers; wild taxa such as felids, cervids and large bovids are also present in small numbers (Monahan in press; R. Bauer et al. 2004) (Table 4.3, Figure 4.2). While the range of wild animals exploited may have increased during

this time, Thomas (1984) argues that use of wild animals decreased, as their remains constitute a smaller percentage of the Early Historic assemblage at Veerapuram (Krishna Valley, Andhra Pradesh) overall. There is some suggestion that fowl (*Gallus* sp.) was first domesticated in South Asia during the Early Historic Period (Margabandhu 1985: 335), but further systematic investigation is necessary.

Site	wild mammals[23]	wild other	domesticates	cattle
Veerapuram	31	Present	78	348
VMS 110[24]	8	0	5	12
Nevasa	30	18	59	111
Brahmagiri	0	0	21	100

Table 4.3 NISP values of various taxonomic categories for Early Historic sites in peninsular India. Compiled from Monahan in press, Thomas 1984, Clason 1975, Nath 1968.

Reconceptualizing the South Indian Early Historic

Many considerations of the Early Historic Period are couched in culture-historical frameworks that conceptualize South India as a passive recipient of cultural influences from the north. According to such narratives, social changes are thought to be the result of population movement or diffusion (Champakalakshmi 1996; Leshnik 1974; Sharma 1971/72). Thus, institutionalized religions, complex social formations (states and empires), social stratification ('caste') and some artifact forms (NBPW, megaliths) have historically been regarded as northern imports into peninsular India (Morrison 1997).

[23] For all tables presented in this chapter, the following animals are included under these headings. *Wild mammals* include wild dog, wild ass, wild cat species, wild Pig, Panther/Leopard, Indian Fox, Chital, Nilgai, Sambar, Muntjac, Gaur, Blackbuck, Indian gazelle, Indian Hare, Indian Porcupine, and Rat. *Wild other* (non-mammals) refers to birds, fish, turtles, crocodiles, snakes and amphibians (also see Appendix I). *Domesticates* include Donkey, Horse, Goat, Sheep, domestic dog, and domestic pig. *Cattle* include both zebu and water buffalo specimens, given the difficulty in differentiating between the skeletal elements of these two species (e.g., Korrisetter et al 2001; Kijngam 1979).

[24] Fauna collected from VMS 110 were collected from screened contexts.

However, archaeological evidence makes a strong case for continuity of both social groups and material culture in this region (Kennedy 2002; Devaraj et al. 1995). In an attempt to move beyond explanatory frameworks that rely on external influences in shaping South Indian cultural history, my analysis emphasizes the recursive relationship between local practices, particularly with respect to animal consumption and subsistence, and wider sociopolitical and economic happenings. Situated between what has historically been conceptualized as "North" and "South" India, the Tungabhadra Valley could be regarded as a cross-roads of long-distance exchange, a focus of political interest and religious proselytization. Archaeological and historical data indicate that during the Early Historic (and perhaps preceding Iron Age) periods, this region became increasingly integrated with the northern part of the subcontinent via political, economic and religious interactions. However, the foundations of the aforementioned transformations that characterize the Early Historic lie in local and regional patterns of land use, subsistence, craft production, and social interrelationships. These inter- and intra-regional dynamics similarly characterize, albeit to a lesser extent, the South Indian Iron Age and Neolithic Periods. While introduced political and religious forms, cultigens and trade objects may have both enlarged and transformed South India, these objects and ideas were themselves transformed by the inhabitants of the Tungabhadra Valley.

4.5 Chapter Summary

Archaeological and historical data provide ample evidence for substantial socio-economic transformations in Southern India between the 3rd millennium B.C. and the early centuries A.D.. However, the nature of the transition between the periods, and many distinctive characteristics of the periods themselves, remain unclear. Lack of systematic research and regional chronologies, as well the pervasive influence of diffusionist models of cultural change, hamper the development of lucid pictures for the South Indian Neolithic, Iron Age and Early Historic periods. Our current state of research indicates various levels of parallelism and overlap, as all three periods share many classes of material culture, and there is evidence that later socio-cultural transformations have roots in earlier local patterns and practices (for example, land use, subsistence, craft production, and social dynamics).

However, there are some aspects of the South Indian archaeological record that can serve as general markers of these periods. For instance, the building of ashmound features apparently ceased at the end of the Neolithic period; however, the creation of megalithic monuments, which began during the Southern Neolithic, apparently persists into the early centuries A.D.. Intensive iron exploitation and production seems to begin during the South Indian Iron Age, although in rare instances iron, copper and gold have been recovered from late Neolithic sites. State-sponsored and religious monuments, such as the Ashokan edicts and Buddhist stupas, do not predate the Early Historic Period, nor do surviving literary traditions and religious texts.

However, with regard to subsistence strategies, the archaeological record of peninsular India to date attests to subtle shifts rather than dramatic changes between periods. Cattle-keeping appears to have been an important component of subsistence economy throughout all of these time periods, although there is some suggestion that a more diverse range of animals were procured during the Iron Age. As such, new species of animals or cultigens were differentially integrated into existing local regimes, and subsistence production may have intensified to meet social demands. Furthermore, the archaeological and historical record contain evidence for a variety of practices through which the social meanings of animals were differentially expressed; for example, cattle dung was burned in ashmounds, animals were interred in megaliths, and religious traditions proscribed animal sacrifice or meat avoidance.

Introduced political and religious forms, cultigens and material culture may have transformed the region, but these objects and ideas were themselves transformed by the inhabitants of the Tungabhadra Corridor. The question of *how* such items and influences were both transformed and transforming, particularly with respect to patterns of animal-use, remains the principal focus of the following analysis.

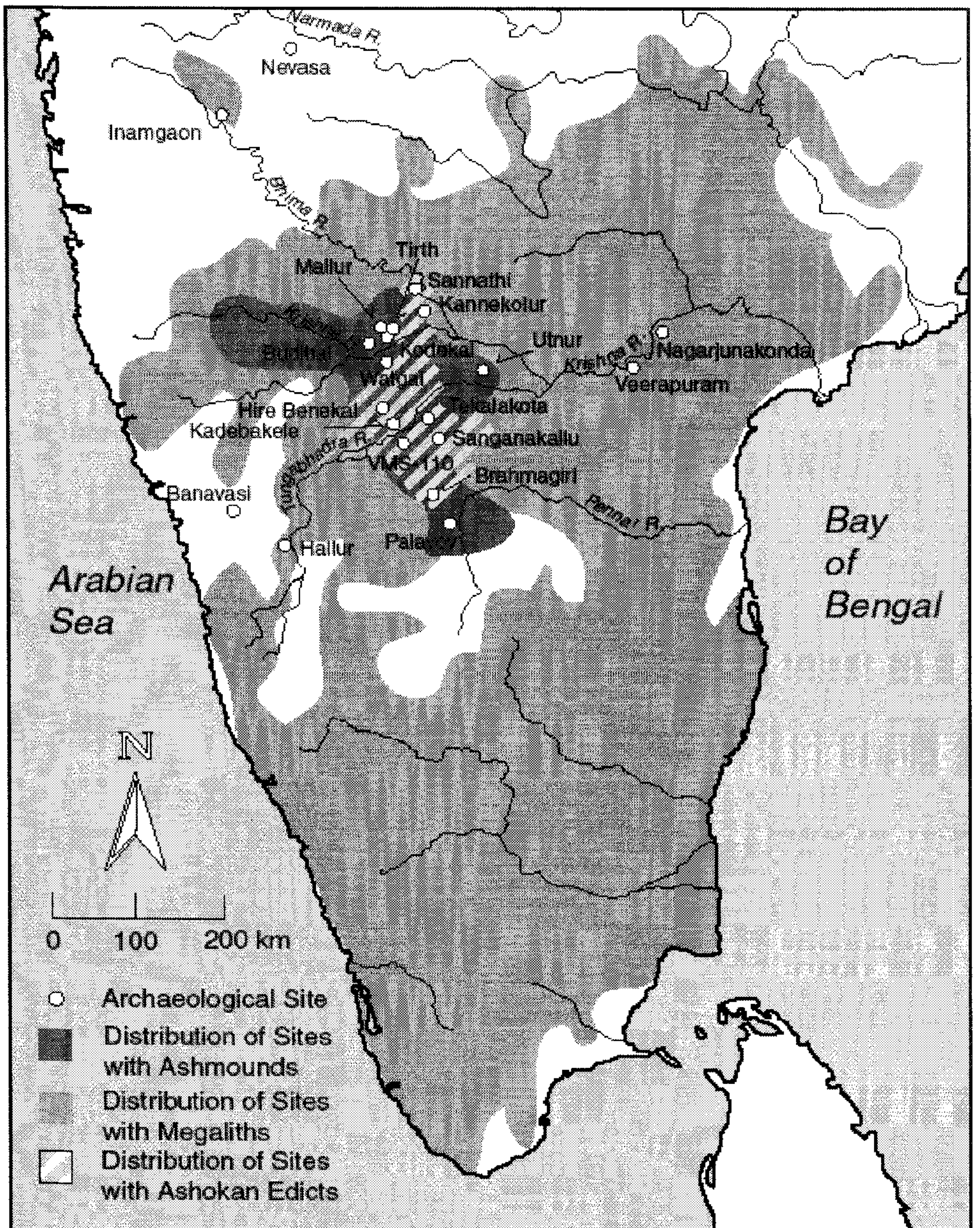


Figure 4.1 – Location of Kadebakele shown with distribution of archaeological sites, Neolithic ashmounds, and Early Historic Ashokan edicts in the region (from Bauer et al. in review).

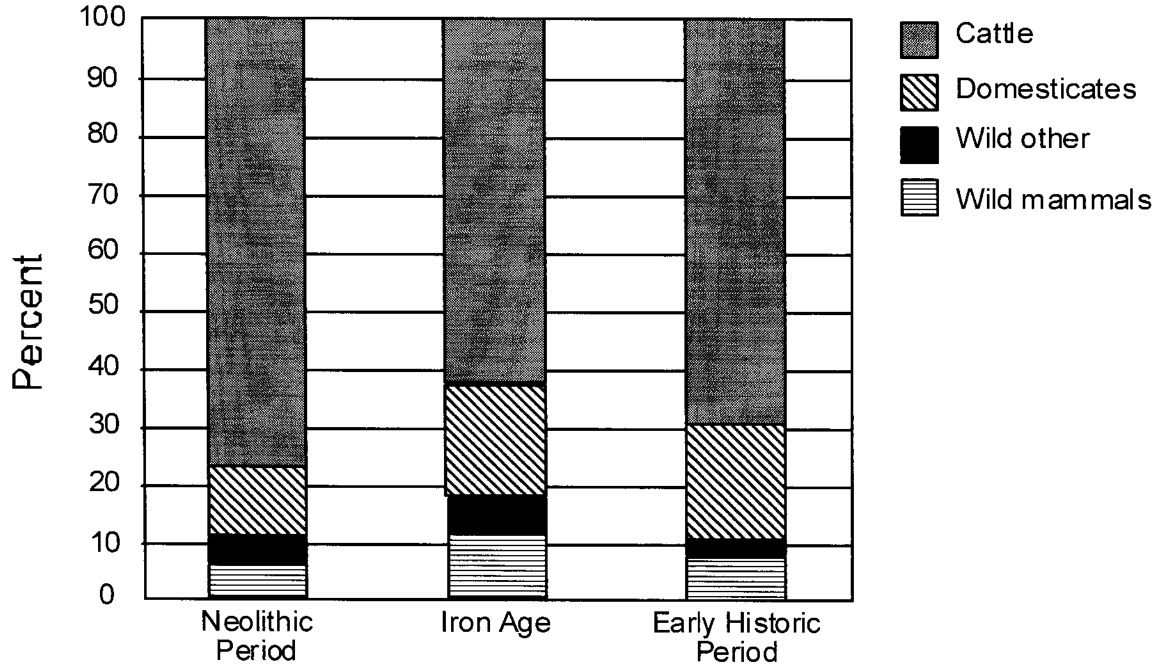


Figure 4.2 – Percent contributions of various taxonomic categories by period, based on reported NISP values. These comparisons are not precise given the variable nature with which faunal specimens have been recorded within the various sources consulted (also see tables 4.1, 4.2 and 4.3).

Chapter 5: Research Area and Excavation Results at Kadebakele

5.1 Introduction

The data and analyses presented in following chapters are based upon a study of faunal remains recovered from an Iron Age/Early Historic site in the Tungabhadra River Valley, Northern Karnataka. These faunal specimens will be used to address patterns of consumption, subsistence and symbolic interfaces of human-animal relationships as potential avenues and indicators of social differentiation.

In this chapter, I present the geographical and archaeological background of my research in order to contextualize the analysis presented in following chapters. I begin with a brief summary of the geology, ecology, flora and fauna of the region, as well as an overview of previous archaeological discoveries in the vicinity. Next, I describe the Iron Age site of Kadebakele, present details on excavation methodology and discuss the preliminary results of radiocarbon samples and ceramic analyses from the site. Last, I summarize areas of the site, illustrating the diverse contexts which have been excavated.

5.2 Geography/Ecology of Northern Karnataka and the Tungabhadra River Valley

Kadebakele is located in Northern Karnataka, along the southern border of the Deccan Plateau in the Tungabhadra River Valley (see figure 5.1). The Tungabhadra flows from West to East, joining the Krishna River and emptying into the Bay of Bengal. Achaean granite outcrops border the river to the north and south, and are separated by narrow colluvial and alluvial tracts. The Deccan Plateau is between 1,000 and 1,500

meters above sea level, and is separated from coastal flat lands to the east and west by the Eastern and Western Ghat mountains. Near Kadebakele, the Tungabhadra River Valley contains valuable deposits of semi-precious stones and metamorphic schist; the southern band forms the Sandur Hills, which contain rich deposits of manganese and iron ore, and were subject to human exploitation as early as the Iron Age (Morrison in press).

This region is located in the orographic rainshadow of the Western Ghats and is characterized by a dry and warm climate that receives less than 500 millimeters of rain per year (Morrison 1995). Most of the region's precipitation falls during the summer monsoon, which occurs between the months of June and October. However, actual rainfall demonstrates intra and inter-annual variability dependent on the strength of the monsoon. Because of the area's general aridity, the Tungabhadra and its tributaries served as foci of settlements and the major source of water to plants and animals in this area until the 13^{th} century (Morrison in press). The river has been regulated by a reservoir since the early 1950s, and in the past, its levels would have varied dramatically.

Vegetation

The flora of present-day Northern Karnataka is a dry, tropical scrub-woodland, likely a result of millennia of intensive cultivation and deforestation (Sinopoli et al. 2004: 3). Most of the low-lying areas surrounding the Kadebakele outcrop are currently under intensive irrigation for rice or sugar cane. However, members of the *Albizia amarra* and *Acacia* series can be observed on the still-forested nearby Sandur Hills (Singh 1988). There have not been paleoenvironmental studies of the study region, but palynological and sediment records gathered from other peninsular areas indicate that precipitation was

greater prior to the second millennium (B.C.E.) than today, with a gradual decline of the monsoon beginning around 2500 B.C. (Caratini et al. 1994) with a pronounced hot, dry climate by 1500 B.C. (Korisettar and Ramesh 2002). However, some scholars have challenged the proposition for a drastic decrease in the monsoon, and suggested that developing agricultural practices were in fact responsible for changes in environmental proxy records (Subash Chandran 1997; Meher-Homji 1996, 1993). Fuller and Korisettar (2004) suggest a middle-ground perspective, arguing that both anthropogenic influences as well as variations in monsoon strength were responsible for producing the vegetational character of the peninsula in the mid 2nd millennium B.C.. Unfortunately, a clear paleoenvironmental picture of the region remains to be developed.

Wild Fauna

The Tungabhadra River Valley is home to a range of diverse mammalian and non-mammalian taxa, and a wide variety of wild prey would have been available to Iron Age hunters. Appendix I was created from modern field manuals (Menon 2003; Daniel 2002; Kazmierczak 2000; Ranjit Daniels 2002; Grewal 1993; Prater 1971) and accounts of colonial-period zoologists (Smith 1943, 1935, 1933; Pocock 194; Day 1889); this appendix lists the mammals, birds, reptiles, amphibians and fish that both historically and currently inhabit the region[25]. High species diversity results in numerous mammals within the same body-size class (recorded as small, medium, large).

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[25] I assume that this species list approximates the range of animals that would have inhabited the region during the Iron Age; the species present in the Kadebakele assemblages provides evidence for Holocene taxa that were once, but are no longer present in the area. Prater (1971) provides the only mention of discrepancies between past and current fauna in the region, stating that gazelles and antelopes were more likely common in the past than today.

Although domesticated mammals are not listed in Appendix I, it is relevant to mention that domesticates also fall within large and medium-mammal size classes. I will show that the herding of domesticates such as zebu cattle and water buffalo was a significant part of Iron Age subsistence practices. Large domestic mammals such as zebu, water buffalo, and horse compete with herbivorous wild fauna for forage and water in this semi-arid region. In addition, one might expect the remains of such large-bodied wild taxa to be relatively low if subsistence energies were focused on pastoral production; that is to say, although pastoralism does not preclude the hunting of game, it is unlikely that pastoralists to engage in the hunting of large game for procuring meat resources when their livelihoods involve such proximity with *walking larders*. Of course, if hunted wild game were bestowed with ritual or symbolic significance, then these expectations are not necessarily relevant.

Indeed, the generally low incidence of large herbivorous wild taxa within the Kadebakele assemblage suggests that domesticated mammals served as a focus of subsistence energetics, and therefore dominated the niche that would have been available for wild taxa of similar size (see Chapter 7 for detailed discussion). It is important to note briefly that Kadebakele is not a seasonal or temporary pastoral encampment (i.e., Chang and Koster 1986; Rissman 1986); the high density of artifacts, structural remains and proximity to arable agricultural land demonstrate significant settlement at the site. The mobility requirements of herding animals suggests that more ephemeral sites throughout the region are poised to inform on the timing of movement throughout the landscape, and such questions cannot be satisfactorily addressed using data from Kadebakele alone.

Furthermore, some members of the population must have accompanied these herds throughout their grazing, and were absent from the site during these periods.

In addition, Iron Age medium-sized domesticates include sheep, goat, dog, and cat. A number of wild canid and felid species endemic to the region render it difficult to discuss the presence or significance of domestic dog or cat at Kadebakele; however, sheep and/or goat were certainly kept as herd animals at this time. In addition, the caves and outcrops surrounding the site's upper terrace are currently inhabited by wild carnivores such as panthers and bears (and probably wolves and jackals). It is likely that such predators would have posed a threat to herd animals in prehistoric times, and unsupervised herds or wandering animals may become easy prey for these hunters. Among modern goat pastoralists in the region, I observed that dogs are used to guard the flock; the general dearth of dog remains suggests that this practice was not undertaken by Iron Age residents of Kadebakele, or that these flocks were not kept at the site. Although wild pigs have persisted throughout Indian prehistory, the pig is known to have been domesticated in Eastern Asia as early as 6000 B.C. (Jin and Flad 2002); unfortunately, pig remains in the South Indian archaeological record cannot be reliably assigned wild or domestic status short of copious metric data.

Although many non-mammalian animals currently inhabit peninsular India, the incorporation of these animals into ancient South Asian society (as food, ritual items, craft goods, etc.) is not adequately understood, in many cases as a result of poor preservation and archaeological under-recovery. This is particularly true for reptiles and amphibians, as many of their skeletal elements are composed of cartilaginous tissue

(Romer 1966: 139). However, turtle remains tend to preserve well in archaeo-sediments, and snake and lizard vertebra and mandibles can sometimes resist attritional processes as well. My research has attempted to gain insight into the significance of these small, wild taxa in ancient contexts by compiling a photographic and morphometric database of their skeletal elements (see Chapter 6); these photographs and metrics were useful in identifying species present in the faunal assemblage from Kadebakele.

A few of the wild animals listed in Appendix I can be considered commensal species, living on and subsisting off of human settlements. Lizards and geckos often inhabit homes and feed on insects, while animals such as rats, mice, wild pigs, shrews and porcupines frequent both fields and habitation areas to feed on cultivated grains and garden plants. These animals, in turn, attract their predators to the vicinity: canids, mongooses, monitor lizards and snakes, for example. The behavior and ecology of larger mammals (such as deer, large bovids, and felids) is not well understood in Northern Karnataka. Seasonal appearances of certain species and timing of births can be useful indicators of when a site was occupied; however, there does not appear to be strong seasonal breeding patterns for wild mammals in South Asia. In general, scholars state that cervid and bovid offspring are born prior to the commencement of the summer monsoon, in late May or early June (Dahl and Hjort 1976: 36; Prater 1971: 291). Bokonyi (1972) also suggests that birds and fish can denote seasonal occupation in climates where such species are migratory. However, the avifauna and fishes of the Tungabhadra Valley are not migrational species.

Ethnographically and historically-documented relationships with animal populations, while not directly relevant to the Iron Age, can shed important light on the regionally-specific interrelationships between humans and animals. Ethnoarchaeological research in Southern India has documented interactions of exchange between forager groups and agriculturalists in the region (Murty 1994, 1992). Such relationships are likely to have a long history throughout the subcontinent, evidenced by various archaeological cases (Morrison 2002; Possehl 2002; Murty 1994, 1992; Possehl and Kennedy 1979) as well as suggested by various historical texts, the earliest of which describe relationships during the Early Historic period in the Southern India (these cases will be elaborated on in Chapter 10, in direct reference to the Kadebakele dataset). Furthermore, Hindu practice and literature indicate the reverence of certain wild taxa. Softshell turtles as often included as part of the modern Vedic altar (Daniel 2002: 33), while Vedic literature mentions the mongoose as both a sacrificial (Taittiriya Sanhita V. 5.) and reviled animal (Vasistha Dharmasutra XXIII. 29), as well as benefit to humans as a killer of snakes and rodents (Pancatantra, 1st book; Artharvaveda VIII. 7.) (cited in Lodrick 1982). It is reasonable may expect some animals to be imbued with symbolic or ritual meaning; unfortunately, there is no existing historical reference can be directly applied to the ideological or religious practices of Iron Age peoples, and beliefs must be inferred from various lines of archaeological evidence.

5.3 Archaeology of the Tungabhadra Valley

While the most famous archaeological remains in the Tungabhadra River Valley are those associated with the medieval capital of Vijayanagara (Fritz et al. 1991, 1984; Stein 1989), archaeological research in the region has documented many Neolithic (Paddayya in press, 1993, 1991/92, 1973; Ansari and Nagaraja Rao 1969; Mujumdar and Rajaguru 1966; Allchin 1963), Iron Age (Leshnik 1974, Nagaraja Rao 1971; Thapar 1957; Wheeler 1947/48) and Early Historic sites (Sinopoli and Morrison in press a, b). This research has been crucial to developing a generalized understanding of material culture in the region. For example, we know that Neolithic-period sites generally contain groundstone axes (Wheeler 1947/48) and coarse grey/pink ceramic wares, with high mica content in their pastes (Morrison in press). Iron Age sites are often identified based on the presence of megalithic rock structures, ranging from dolmens and menhirs to cobble alignments and boulder-filled crack features (Lycett and Morrison in prep; Mohanty and Selvakumar 2002), as well as black-and-red ware (BRW), slipped and polished black ware, and slipped and polished red ware ceramics. Rouletted ware and Russet-coated Painted ware (or "Andhra Ware" in Wheeler 1947/8, 1954), are considered diagnostic of Early Historic period sites in the area. The latter form is produced as a variant of BRW when a russet-colored wash and painted design has been applied to a red, black or BRW vessel.

Despite previous efforts, however, periodization in the region remains problematic due to a lack of systematic regional research and inadequate chronologies (see also Chapter 4). As a result, some of the material culture of this region cannot be

considered as reliable temporal markers of one period or another. For example, as discussed earlier, major ceramic wares such as BRW appear to have been produced for over a millennium (Sinopoli et al. 2004; Devaraj et al. 1995), and finer subtypes and phases have yet to be discerned (but see Morrison 2001). Megalithic rock constructions thought to characterize the Iron Age were built as early as the Southern Neolithic Period (Morrison 2001; Devaraj et al. 1995) and continued to be constructed during the Early Historic Period (Lycett and Morrison in prep). Even the earliest incidence of iron in peninsular India (at Hallur, dated to 1100 B.C. [Nagaraja Rao 1971]) occurs prior to the start of the Iron Age-proper in peninsular India.

The Vijayanagara Metropolitan Survey (VMS) is the only large-scale, systematic survey of this region to date (Sinopoli and Morrison in press a, b), and the Early Landscapes of the Tungabhadra Corridor (EHLTC) project has followed up on the survey's efforts to explore and excavate a number of sites identified by the VMS. These projects are broadly aimed at rectifying the aforementioned issues by producing both a local understanding of Neolithic, Iron Age and Early Historic lifeways, as well as examining the region's interactions with wider spheres of influence (e.g., A. Bauer et al. in review; Monahan in press; R. Bauer et al. 2004; Sinopoli and Morrison 2004; R. Bauer 2003; Bridges 2003; Johansen 2003; Sugandhi 2003). Current research is underway to produce a more refined local ceramic typology, examine variation between sites in the area, and investigate land use and agricultural regimes. Furthermore, radiocarbon dates from excavated contexts will enhance our understanding of synchronic and diachronic settlement patterns at one site in the area.

Research Site

My research focuses on the site of Kadebakele (VMS 530) in the Tungabhadra River Valley, in the Koppal District of Karnataka, identified and mapped by the VMS in 1996 and 1997 (Sinopoli and Morrison in press a, in press b) and excavated during 2003 and 2005 by the EHLTC project. My analysis uses faunal data gathered from these excavations to explore human-animal relationships in the South Indian Iron Age, particularly with regard to consumption, husbandry, and symbolic interactions.

The Kadebakele settlement area is estimated to be over 40 hectares, and is located on and around a high outcropping granite hill on the northern bank of the Tungabhadra River, approximately 140 meters above the river plain (Figure 5.1). The village of Kadebakele is at the northern base of the outcrop, and gains its name from the nearby Vijayanagara-period fortification (Kadebakele means "last gate" in Kannada). The site extends southward from the outcrop down to the Tungabhadra River flood plain; this "River Terrace" area has yet to be excavated, and includes significant surface evidence for Early Historic (and possibly later Middle Period) occupation. This area of the site has been partially mapped, and will be explored in greater detail in future research seasons.

The highest densities of surface materials at Kadebakele are centered on multiple flat terrace zones on the outcrop, with the majority of excavations taking place on the uppermost inhabited terrace, designated the "Upper Terrace" (Figure 5.2). The Upper Terrace encompasses an area approximately 300 meters north-south by 100-200 meters east-west. It is largely enclosed by boulders, and is accessible via two steep paths up to the terrace from the south and northwest. These routes are defined and bordered by walls

and boulder alignments that, along with the large boulders that constitute the hill itself, largely restrict movement up the slopes. Thus, access to the upper terrace is difficult as topography and constructed stone alignments would have restricted access to this area in the past as in the present. As a result, this area of the site is very well preserved, bearing little evidence for extensive recent human activity. Although animals are brought to graze on the terrace and some areas have been plowed and cultivated in recent decades, there is apparently little visible damage to archaeological remains. High surface densities of artifacts are scattered across the upper terrace, and stone alignments – which excavations have revealed as megalithic constructions – are present along the northwestern edges of the terrace. Several petroglyphs and rock paintings are visible in the boulders to the south and west of this area.

The distribution of surface features and artifacts on multiple terraces suggests some degree of spatial differentiation in settlement layout and organization at Kadebakele (Sinopoli et al. 2004; Johansen 2003). The sites' uppermost terrace is a gently sloping basin enclosed by high boulders that would have both provided protection to the site's inhabitants and hampered visibility to areas beyond the terrace. A modified natural depression lies in the middle of this terrace, and served as a natural catchment basin for rainwater. This reservoir basin is approximately 40 meters in diameter, and has been shored up along its northern side by a one and a half meter high cobble wall. The basin would have served as the only durable water source on the upper terrace, although sedimentary analysis of the reservoir deposits indicate that it did not hold water continuously. Rather, the strata show evidence for periodic wetting, drying, and in-situ

soil development. Such periodicity is expected for a reservoir basin dependent on seasonal rainfall; it would have held water during the monsoon and for some time afterwards, perhaps providing drinking water, water for animals, and agricultural activities. Unfortunately, material for absolute dating was scarce in the reservoir sediment, and at present we are not able to link the stratigraphic sequence to any absolute dates for the reservoir's use (Sinopoli et al. 2004: 34).

5.4 Excavations at Kadebakele

Excavations at Kadebakele took place over two field seasons (2003 and 2005), and were concentrated on the site's Upper Terrace, although one small excavation unit was placed on the Middle Terrace in 2005. Midden deposits and structural contexts were revealed in subsurface investigations, from which an abundance of cultural materials were collected. Excavation proceeded initially in ten centimeter levels, and natural stratigraphy was followed where stratigraphic breaks were evident. Features such as pits and megaliths were excavated separately in an effort to isolate these depositions as discrete contexts. All archaeological sediments were screened through 1/8 inch (3.18 mm) mesh, and all recovered materials were bagged, labeled and collected for analysis in the field laboratory. Samples were also collected for flotation, pollen, soil chemical analyses and radiocarbon dating. Unit plans were prepared at the base of every level, and both digital and black and white images were taken.

Results from preliminary research at Kadebakele

The majority of data collected from the VMS and recent excavations at Kadebakele are being analyzed. However, a few preliminary results from radiocarbon and ceramic analyses indicate that the site's Upper Terrace was differentially occupied during the Iron Age.

Carbon-14 results

The radiocarbon samples analyzed to date were collected from the 2003 and 2005 excavation seasons from Block B (20E/-28N), North Midden (94.84E/-16.93N) and Southern Slope (-21.6E/204N) units (Figure 5.3), and dated by Beta Analytic laboratory. These samples yielded contemporaneous dates which place the occupation of Kadebakele during the South Indian Iron Age (1000 – 300 B.C.). Dated samples from Block B were associated with a masonry wall structure, occupational surface and upper archaeo-deposits. Calibrated ranges for the two samples associated with the structure identified near the base of 2003 excavations overlapped, suggesting a date for the structure in the late 9th to early 8th century B.C.. Radiocarbon dates collected from the North Midden unit indicate that these deposits accumulated quite rapidly in the mid-first millennium B.C.E., suggesting an intensity of dumping (and perhaps associated habitation) in the northern half of the Upper Terrace during this period. Dated materials from within the Southern Slope megalithic deposits indicate a relatively rapid sequence of construction and filling in this area during the mid-first millennium B.C.E..

Sample #	Unit & Level	Analysis	Conventional (uncal)	2-sigma calibration
2003-1	NM Level 6	AMS	2520 +/- 40 BP	Cal BC 800 – 520
2003-2	NM Level 10	AMS	2600 +/- 40 BP	Cal BC 820 – 770
2003-3	NM Level 27	AMS	2590 +/- 40 BP	Cal BC 810 – 760, 640 – 560
2003-4	NM Level 20	AMS	2540 +/- 40 BP	Cal BC 790 – 420
2003-6	B Level 9	Radiometric	2360 +/- 60 BP	Cal BC 706 – 680, 550 – 360
2003-7	B Level 15	AMS	2770 +/- 40 BP	Cal BC 1000 – 825[26]
2003-8	B top Feature 7	AMS	2520 +/- 40 BP	Cal BC 830 – 780
2003-9	B Feature 7	AMS	2620 +/- 40 BP	Cal BC 830 – 780
2005-1	SS Level 10	AMS	2520 +/- 40 BP	Cal BC 800 – 520
2005-2	SS Feature 3	AMS	2530 +/- 40 BP	Cal BC 800 – 520
2005-3	SS Level 23	AMS	2490 +/- 40 BP	Cal BC 790 – 420
2005-5	B Feature 13	AMS	2550 +/- 40 BP	Cal BC 800 – 750, 700 – 540
2005-6	B Level 5	AMS	2400 +/- 40 BP	Cal BC 760 – 680, 550 – 390
2005-7	B Feature 12	AMS	2430 +/- 40 BP	Cal BC 770 – 400

Table 5.1 Radiocarbon results from excavations at Kadebakele.

Preliminary Ceramic Analyses

During the 2003 and 2005 field seasons, over 69,000 ceramic specimens were sorted and tabulated according to a coding system established by Sinopoli and Morrison (in press a, b). In concert with Morrison's revised chronology for Brahmagiri (Morrison 2001), the Kadebakele ceramic assemblage is being used to establish a regional typological scheme for the Iron Age and Early Historic periods. Despite the large number of ware categories identified (see Table 5.2 below), the majority of pottery recovered in excavations and surface collections at the site belong to a relatively small subset of ware types (see Table 5.3).

[26] This date may not be accurate, as it appears to be stratigraphically aberrant and could have been produced as a result of contaminated organic matter (C. Sinopoli, personal communication).

Ware Number[27]	Description
1	Black Plain Ware
2	Red Plain Ware
3	Brown Plain Ware
4	Slipped/Polished Red Ware
5	Slipped/Polished Brick Red (crackled)
6	Slipped/Polished Black Ware
7	Black and Red Ware (BRW)
9	Russet Coated Painted Ware
10	Plain Buff Ware
11	Plain Grey Ware
12	Plain Pink Ware
13	White Painted BRW
14	Painted Plain Ware
16	Slipped/Polished Buff Ware
17	Black Paint Red-slipped Ware (Jorwe)
18	Brown-slipped Polished Ware
19	Black and Brown Ware
90	Other
99	Indeterminate

Table 5.2 Ceramic Ware Categories, from Sinopoli et al 2004.

Ware type	Number of specimens	Percentage of total
Slipped/Polished Black	38,294	40.7%
Slipped/Polished Red	32,699	34.7%
Black and Red	13,486	14.3%
Slipped/Polished Brown	8,189	8.7%

Table 5.3 Ware frequencies from 2003 and 2005 excavations, from Sinopoli et al 2004 and Morrison et al. 2005.

The most numerous ware overall recovered from excavations was Black slipped/polished ware, while Red slipped/polished ware occurred slightly less commonly. Next in frequency was Black and Red ware and Brown slipped/polished ware. All other wares comprised less than one percent of the total analyzed assemblage. In 2005, during

[27] These numbers refer to values used in coding, and are not meant to infer chronological or sequential relationships between ware types.

ware sorting and weighing, vessels were also grouped by broad vessel category into bowls, jars, and other or unidentifiable forms. Of the sherds for which vessel form was identifiable, bowls accounted for roughly 44%, while jar sherds comprised nearly 56%. Since jars can generally be expected to break into more pieces than bowls, these numbers do not address the frequency of use of these vessel forms, but may provide some comparative data with which to compare diverse excavation contexts in future analyses.

In general, the Kadebakele bowls were small, polished, thin-walled serving vessels; the majority of these vessels were created in Black slipped/polished ware (57%) and less commonly, Black and red ware and Red slipped/polished ware. Although the potters' wheel was in use during the South Indian Iron Age, Sinopoli et al. (2004) observe that the vast majority of bowls were hand-built using coiling technology. This is not surprising, since most bowls had round bases this form would have been difficult to produce on the wheel. Although this technique is considered less 'sophisticated' than the potter's wheel, the artisans making these serving bowls were highly skilled and produced very thin-walled and elegantly formed vessels.

In contrast to bowls, the large storage and transport jars recovered from Kadebakele were predominantly wheel-made; approximately half of the jar sherds were of Red slipped/polished ware, with Black slipped/polished ware and Brown slipped/polished ware occurring less frequently. The Red ware jars were typically large, wheel-made, storage and transport jars, while the Black slipped and polished ware jars tended to be relatively smaller hand-made, open-mouthed serving vessels, that graded into the bowl categories.

Firing techniques were also sophisticated, and potters clearly had excellent control of firing atmospheres for the production of oxidized (red wares), reduced (black wares), and both oxidized and reduced (black and red wares) vessels. Sinopoli et al. (2004) suggests that the long-term co-existence of hand-building and wheel-building technologies in the South Indian Iron Age raises interesting questions concerning labor investment and productive organization. For example, it will be interesting to consider whether both techniques were employed within the same workshops or if different potters specialized in producing hand versus wheel-made ceramics.

With regard to surface distribution of ceramics on the Upper Terrace, Johansen (2003) observed differential distributional pattern among the major ware types. Red slipped/polished ware was the predominant in areas south and north of the reservoir depression, while along the west and northwestern margin of the Upper Terrace, the proportions of this ware were significantly diminished. The distribution of Black slipped/polished ware and plain red ware along the western and northwestern margin of the Upper Terrace is distinctive from the rest of the site as well.

Johansen (2003) also discusses variation in vessel type at the site, noting that areas along the banks of the reservoir, and to its south, demonstrate very similar proportions of jar to bowl sherd weights, with jar weights predominating. The area northeast of the reservoir displays a much higher proportion of bowl shard weight than jars. Based on this analysis, he suggests that the Southern Slope region, and the north and south banks of the reservoir depression represent midden deposits. The midden-like

deposits surrounding the reservoir may have been redeposited from elsewhere as construction fill.

These preliminary results suggest varying patterns of Iron Age occupation on the Kadebakele Upper Terrace. Subsurface investigations were undertaken during 2003 and 2005 to explore nature and extent of occupational contexts in these areas.

Unit Summaries

Seven excavation areas were explored over the course of two seasons at Kadebakele (see figures 5.2 and 5.3). Five units were placed on the site's Upper Terrace, one on the Middle Terrace, and one in the Upper Terrace reservoir basin. Excavation of the reservoir did not produce any cultural materials, and this unit will not be further considered. Archaeo-deposits proved to be quite deep at Kadebakele, and sterile sediments were not reached at the base of excavation in five of the six other units.

<u>Block A</u>

Block A was composed of 12 two by two meter units placed alongside the boulders on the western edge of the Upper Terrace, north of the reservoir depression; excavations reached a final depth of approximately 0.5 meters below the ground surface. A total volume of 4,726 liters of sediment were excavated from Block A, which contained an average faunal density of 2.00 grams/liter. This area exhibited a slight overall northern aspect and numerous rock alignments are visible on the surface. These alignments were mapped and explored via excavation in 2005; these stones were originally expected to reveal residential features, but subsurface explorations immediately exposed a different and more complex depositional history. Unfortunately, the deposits in

this area are quite shallow and disturbed by millennia of seasonal run-off and erosion from the outcropping boulders nearby.

The Block A excavation area contained numerous megalithic rock constructions, ranging from stone circles to a cist-like enclosure, to circles pierced by lines (a symbol also common in petroglyphs, paintings and inscribed in bedrock cupules in the region). These stone constructions were associated with multiple surfaces and pit features (see figure 5.4). These materials suggest that Block A was a locus of repetitive ritualized, perhaps commemorative, activities which possibly post-date the main occupation of the upper terrace in the Iron Age (Sinopoli 2005); with no absolute dates currently available for these excavated deposits, further investigation will surely shed light on the relationship between this area and the rest of the upper terrace. Indeed, Johansen (2003) has observed that the density and distribution of surface ceramics indicate that both the western and northwestern margins of the Upper Terrace (Block A, and to its north) are distinctive areas with a different depositional and occupational history than the rest of the site.

Block B

Block B was composed of four, 2 meter by 2 meter units, one excavated in 2003 and three excavated in 2005; excavations reached a final depth of approximately 1.8 meters below the surface. A total of 16, 875 liters of sediment were excavated from this area, which contained an average faunal density of 1.86 grams/liter. On the ground surface in this part of the Upper Terrace, only a fallow agricultural field is visible. However, excavations in this area revealed several structural features, including at least

three in-situ plaster surfaces, storage pits, wattle and daub constructions, a stone masonry structure, and post holes (figure 5.5). Artifacts excavated from these contexts include ceramics, fauna, iron (both slag and objects), beads, lithics, groundstone, and building material such as daub and wood (charcoal). These materials indicate a history of habitation and domestic refuse disposal, suggesting that the Block B deposits represent a series of domestic Iron Age contexts.

Eastern Upper Terrace (52E/-86N)

Unit 52E/-86N was a two by two meter unit located in a fallow field near the eastern margin of the upper terrace, with large granite boulders approximately five meters to the east. Excavation in this area reached a final depth of approximately 2 meters below the ground surface. A total of 3,038 liters of sediment were excavated from this area, which had an average faunal density of 1.60 grams/liter. Architectural remains such as plaster and daub were encountered as early as 30 centimeters below the ground surface in this unit, although these remains were not in situ and could not be associated with any specific structures (figure 5.6). Excavations were not expanded horizontally, and these in situ features could not be ostensibly associated with other structural remnants; in addition, this excavation area yielded evidence for secondary deposits, such as redeposited structural debris and trash fill. The sediments revealed in this unit likely represent a series of repeated dumping events that may or may not have been accumulated atop an abandoned structure; domestic refuse such as ceramics and fauna were very common, especially in lower levels.

North Midden (94.84E/-16.93N)

This one by one meter excavation unit was located close to the northern edge of the outcrop hill of the upper terrace, on a small promontory surrounded by boulders secluded from the rest of the upper terrace; excavations in 2003 reached a final depth of approximately 2 meters below the ground surface. A total of 1,814 liters of sediment were excavated from this area, which contained an average faunal density of 8.82 grams/liter. The terrain slopes down steeply to the north as do the strata revealed in excavation (figure 5.7). Considerable color variability between strata was also observed, which may result from micro-environments created by variously composed deposits of organic and inorganic materials, as well as differential burning. Excavations yielded rich cultural content, including nearly complete ceramic vessels and partially articulated skeletal elements. Deposits in the unit likely derive from multiple episodes of dumping onto a sloping, uninhabited region on the edge of the settlement. Refuse included in these dumping episodes may have been associated with the structures revealed in excavations of Block B (and possible habitation/refuse disposal in the Eastern Upper Terrace area). Sinopoli et al.'s (2004: 35 – 37) observation that ceramic ware frequencies were similar between the three units excavated in 2003 (Block B, North Midden, Eastern Upper Terrace) further buttresses this interpretation.

Southern Slope (-21.6E/-203 N and -204N)

The Southern Slope units were located on a small (approximately 20m x 8m), flat area in the southern part of the Upper Terrace, bordered on the north and west by granite boulders, and defined along the east and south by a steep drop-off. Two one by one meter

units were placed along the western margin of a robber's trench; excavations in these units reached a maximum depth of approximately 1.75 meters below the surface. A total of 1,819 liters of sediment were excavated from this area, which contained an average faunal density of 23.04 grams/liter. Visible on the ground surface are several semi-circular megaliths and/or rock alignments, and rock constructions along the southern slope indicate that the area was once heavily terraced. In the course of excavation, an alignment of large, granite cobbles was exposed approximately one meter below the surface; these are likely associated with the surface rock alignments visible nearby (figure 5.8). Below this, a series of flat, plaster surfaces and intervening fill deposits were encountered; these deposits contained an abundance of ceramics, as well as and faunal remains with a high degree of skeletal completeness, possibly representing partial animal interments or the remains of communal consumption events. These artifacts and features evidence ritualized activities surrounding the creation of megalithic structures, which involve the use and disposal of animal remains.

Interestingly, the uppermost strata in this unit are quite different from those just described. These upper deposits parallel the eastern aspect of the present slope and contain a high density of ceramics and fauna, and well as some iron artifacts. These deposits may represent the accrual of slope-wash and midden dumping upon ancient stable ground surfaces, after the construction of megaliths in the area. Johansen's (2003) analysis of surface vessels forms similarly suggests that the Southern Slope area was used for disposal of refuse. Subsurface explorations support this interpretation for the upper strata, while lower strata reflect ritualized activity associated with megalith construction.

Middle Terrace (0E/125N)

The Middle Terrace is a small, flat area located behind the modern Kadebakele village, to the north of the upper terrace. A high density of ceramics was visible on the modern ground surface, and excavations were undertaken to explore the extent of archaeological deposits in this part of the site. A one by one meter unit was excavated to a final depth of 0.9 meters below the ground surface. A total of 3,038 liters of sediment were excavated from this area, which contained an average faunal density of 2.4 grams/liter. Three distinct natural strata were observed, and artifact density progressively decreased with depth, and excavations were halted after sterile deposits were encountered.

5.5 Chapter Summary

Northern Karnataka, and the Tungabhadra River Valley more specifically, are home to a vast array of wild fauna. This is also a region with a long record of human habitation, replete with many impressive archaeological monuments and remains. Kadebakele is the largest currently known Iron Age/Early Historic site in the central Tungabhadra region, excavated for two field seasons (2003 and 2005) by the EHLTC project. This site provides a series of distinctive contexts which evidence patterns of differential occupation and use; my research is founded upon an analysis of faunal remains excavated this site, with the intention of examining patterns of animal use in the context of human social life. Specifically, I seek to investigate how practices of

consumption, husbandry and symbolic interactions with animal populations interdigitate with socio-cultural processes of differentiation and distinction.

To accomplish this task, I briefly discuss the dataset upon which my interpretations are built and in the following chapter, I present details on the study and analysis of faunal specimens from Kadebakele. Because taphonomic forces affect the composition of an archaeological assemblage, I consider the effects of attritional factors on the Kadebakele fauna and distinguish classes of data that can be reliably used to found interpretations about animal use and social differentiation.

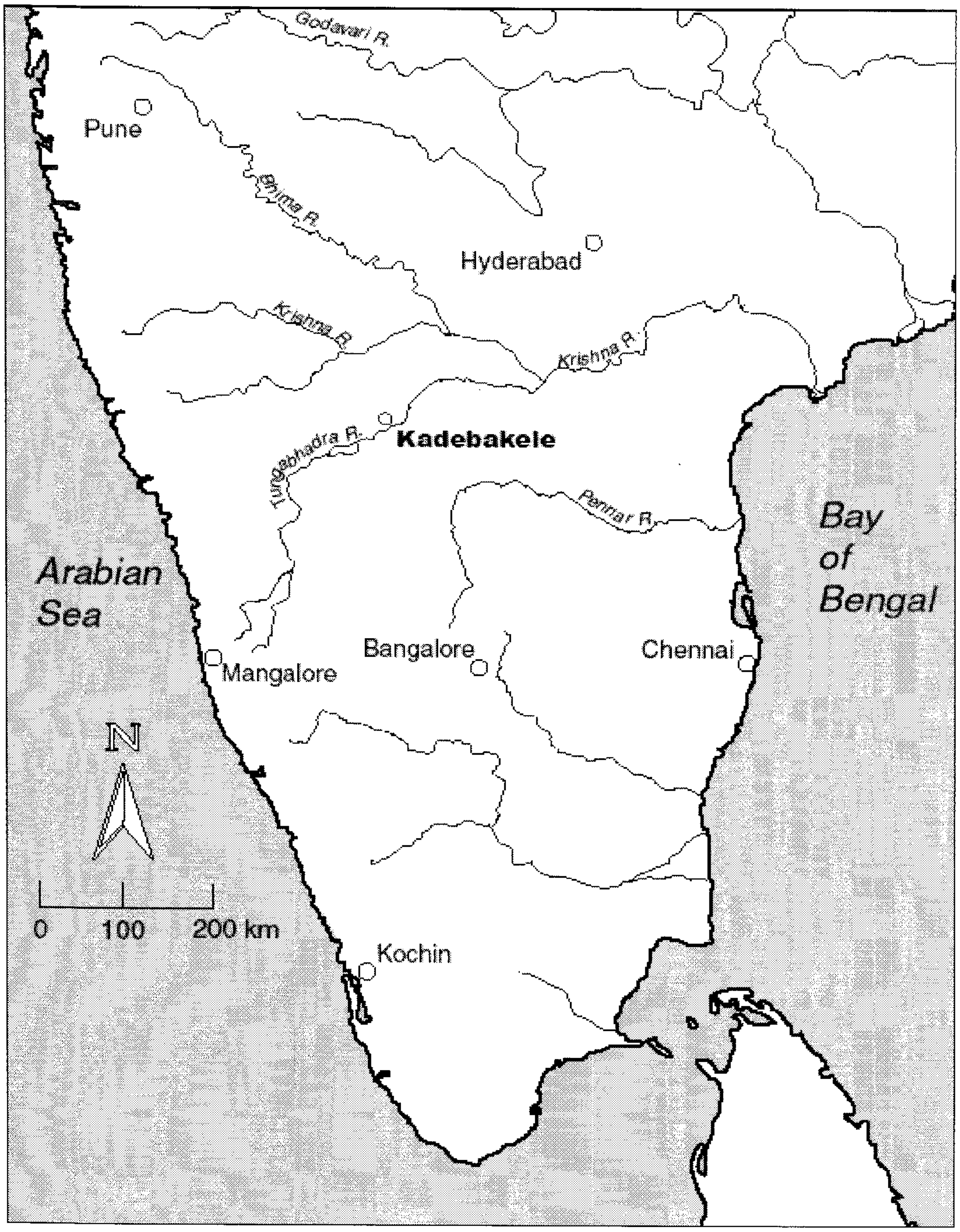


Figure 5.1 – Location of Kadebakele, Karnataka, India.

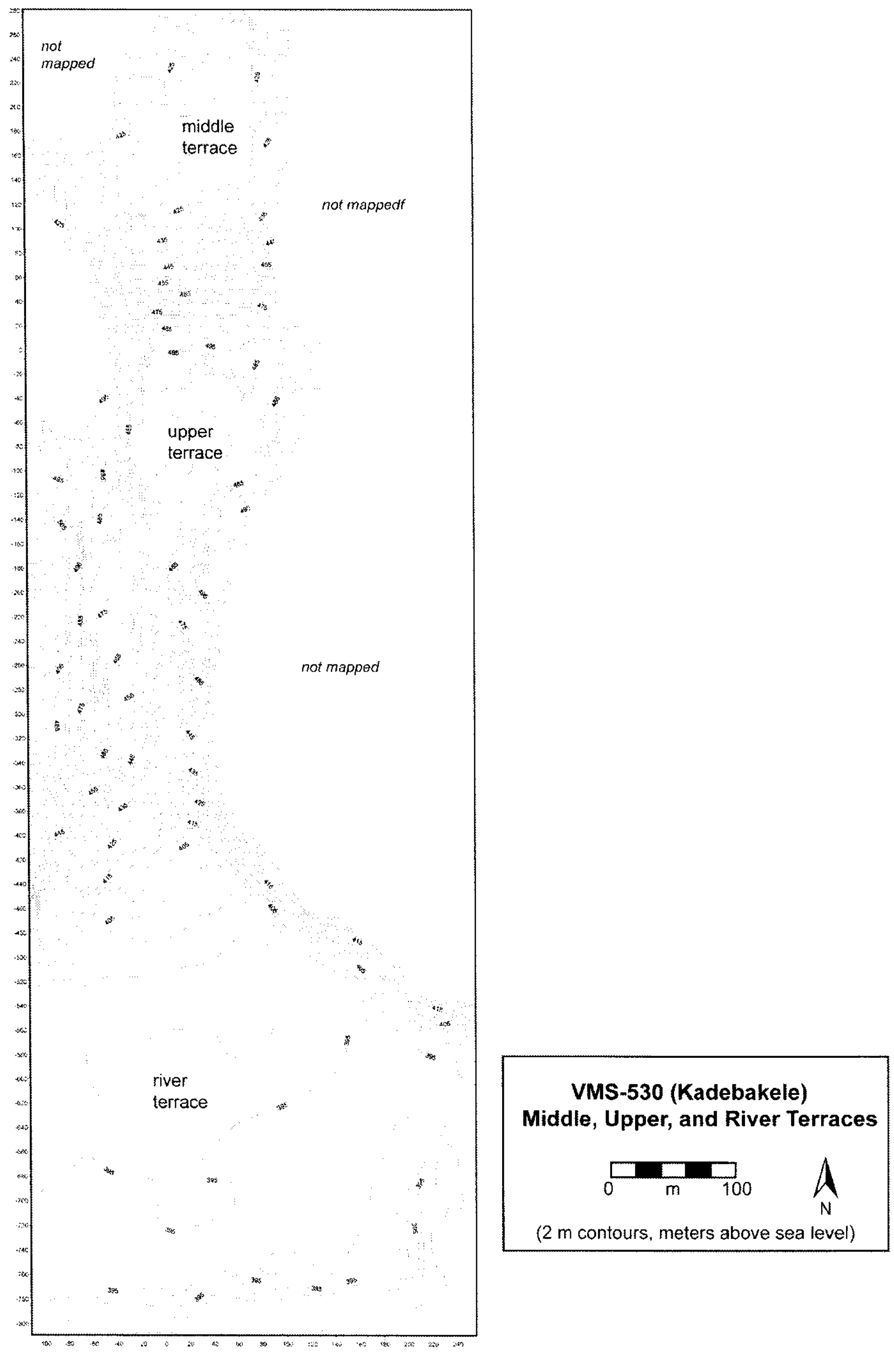


Figure 5.2 – Kadebakele site map.

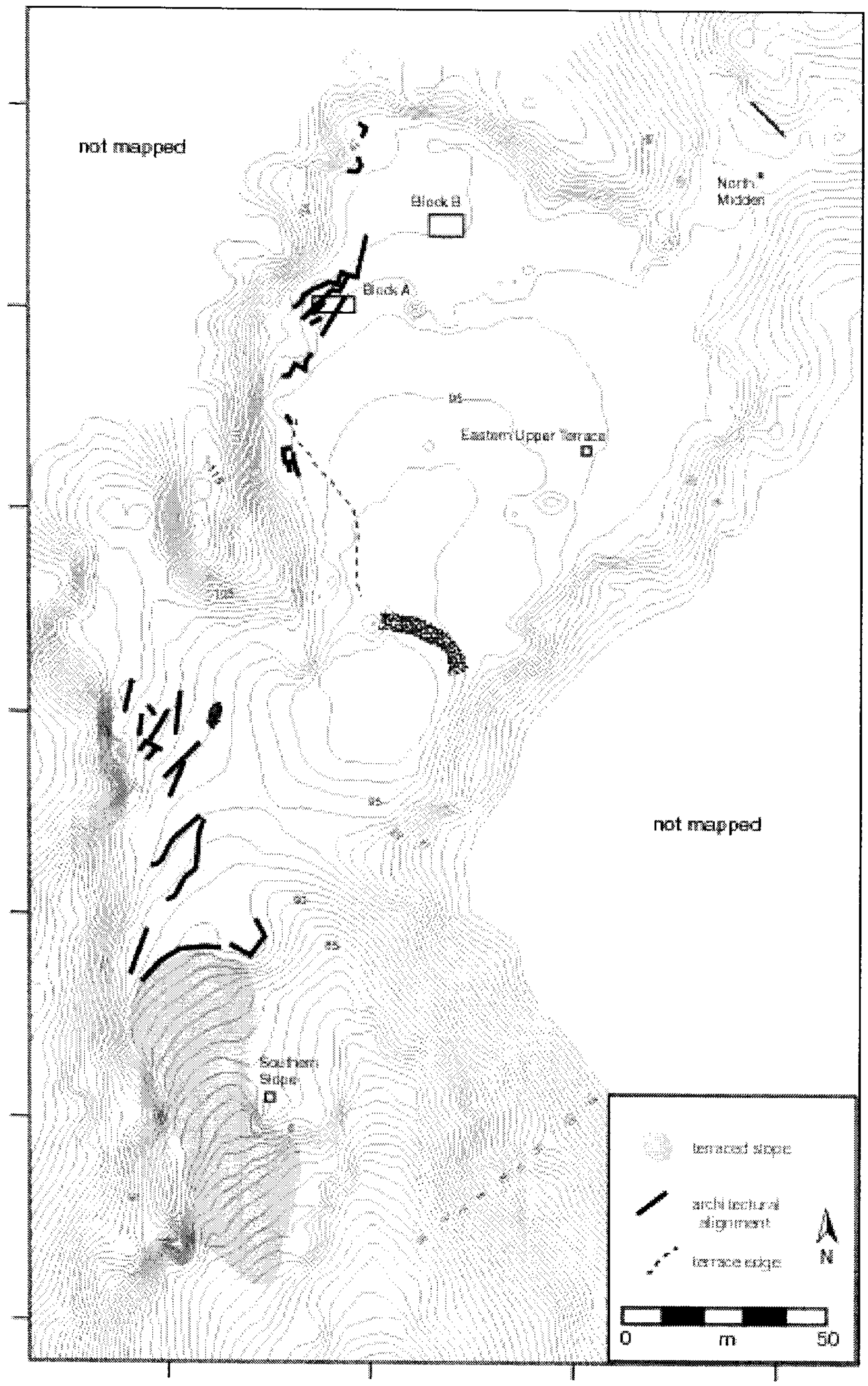


Figure 5.3 – Upper Terrace contour map.

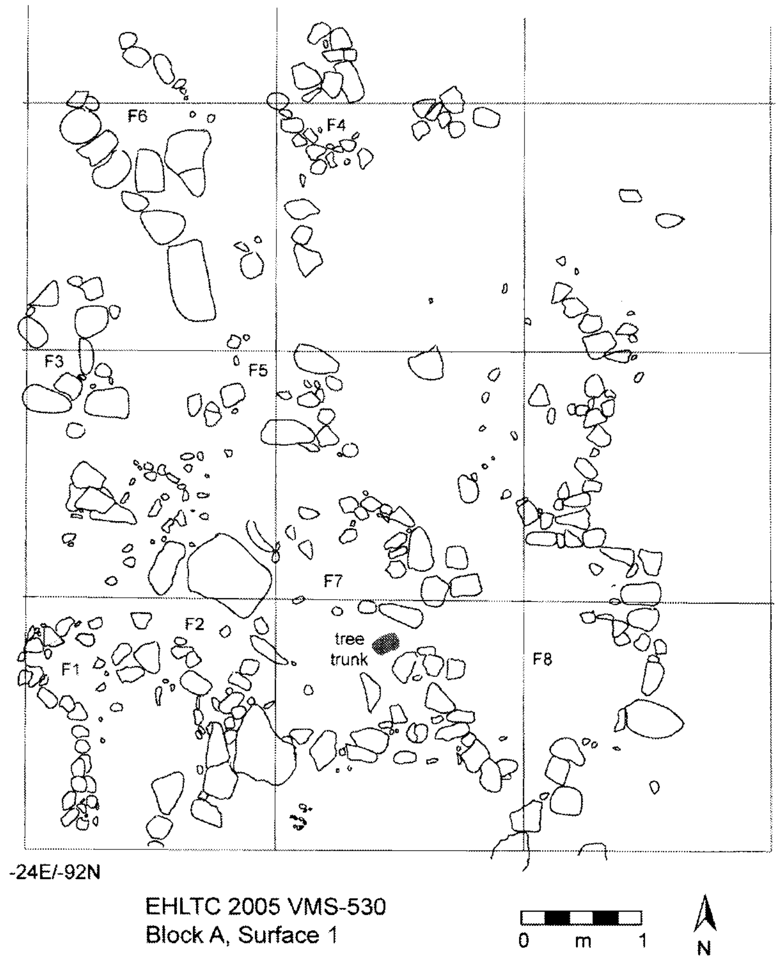


Figure 5.4 – Plan drawing of megalithic features in Block A.

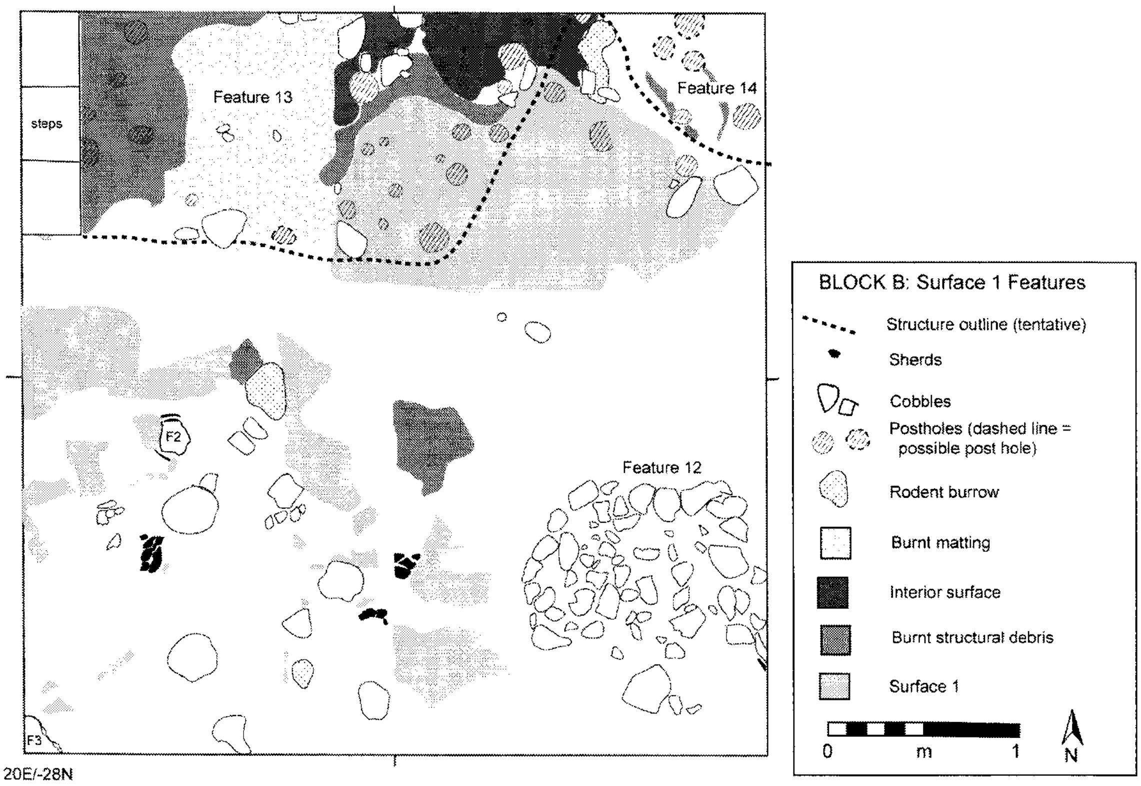


Figure 5.5 – Plan drawing of structural features and associated surfaces in Block B.

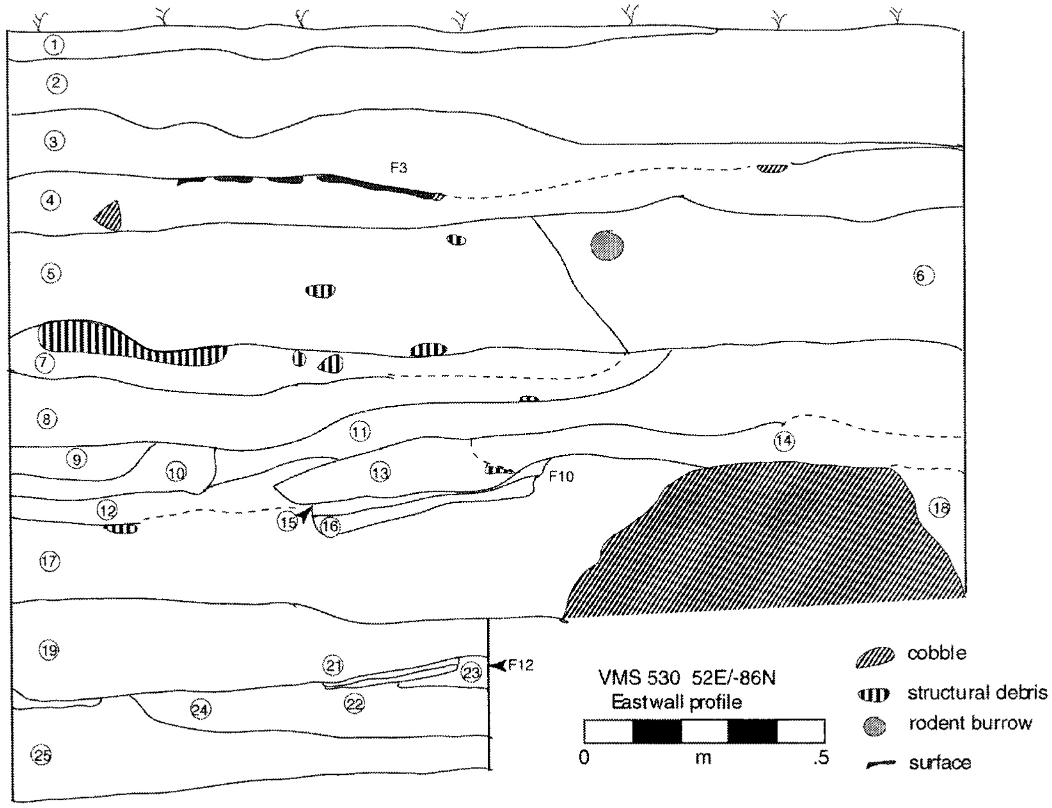


Figure 5.6 – Easter Upper Terrace unit profile drawing.

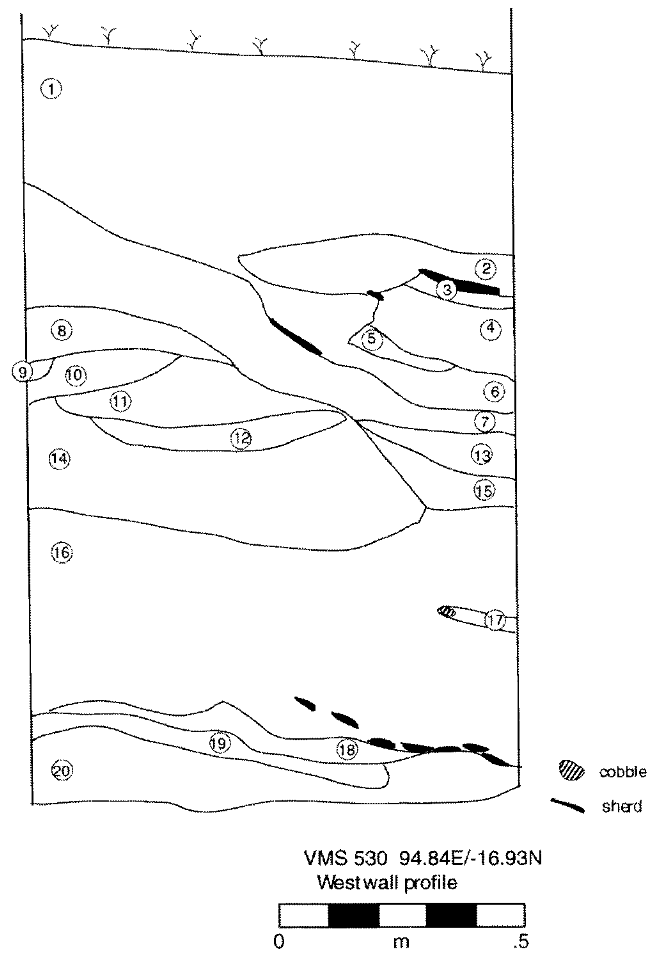


Figure 5.7 – North Midden unit profile drawing.

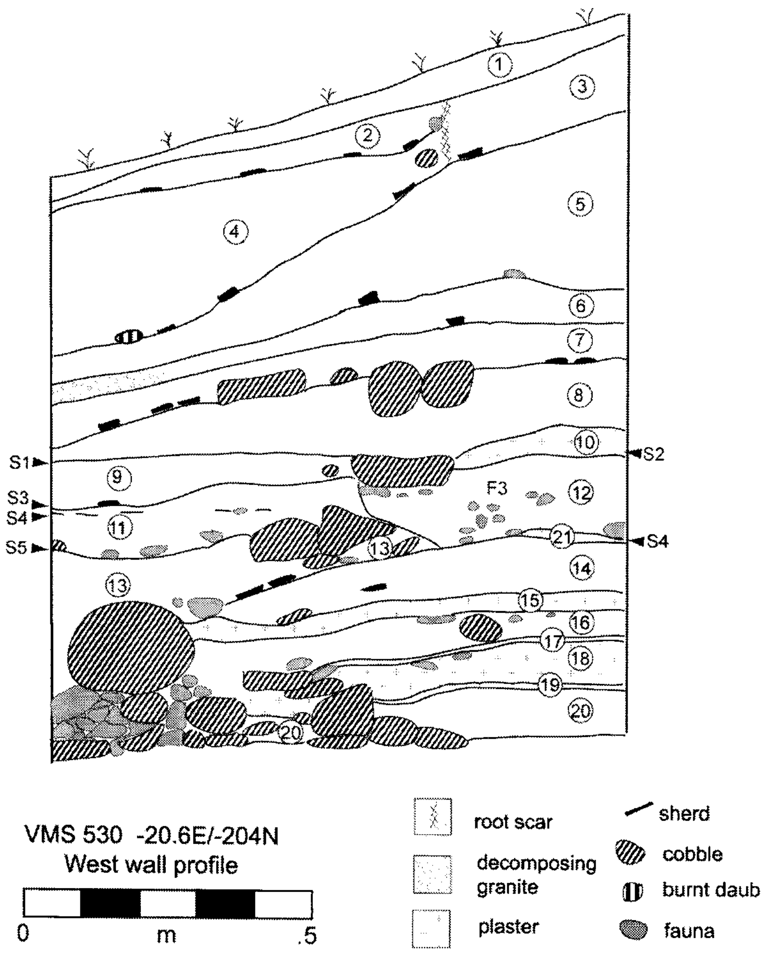


Figure 5.8 – Southern Slope unit profile drawing.

Chapter 6: Methods of Faunal Analysis and Taphonomic Considerations

6.1 Introduction

Methods of data collection necessarily shape how data can be interpreted; hence it is important to discuss my approach to studying faunal specimens prior to the discussion of animal use at Kadebakele. In this chapter, I present my methods of analyzing faunal specimens from Kadebakele and detail the various categories of data collected from each specimen. I discuss my approach to securing species identification, as well as steps I have taken to create a reference collection for the skeletal remains of wild taxa.

In order to formulate reliable and confident interpretations of faunal data in the following chapters, it is imperative to discuss the impact of taphonomic forces on the Kadebakele assemblage. Thus, this chapter concludes with a brief discussion of recovery biases and taphonomic forces, such as density-mediated attrition and patterns of fragmentation within excavated deposits. I close with a brief word on what I consider to be robust classes of faunal data that can be reliably used to infer patterns of animal use and social differentiation during the Iron Age at Kadebakele.

6.2 Methods of Zooarchaeological Analyses

In this section I detail the methods used to collect data on faunal specimens excavated from Kadebakele. Specifically, I discuss references consulted and created to ascertain species identifications, and types of information gathered from bone specimens.

Collections and Reference Material Used

Central to zooarchaeological analyses is the identification of species, accomplished through reference to ancient and modern comparative collections and/or published materials. Below, I present the methods employed to gather data from the Kadebakele faunal assemblage. Specifically, I discuss references consulted and approaches used to ascertain species identifications.

Cultural materials excavated from sites in India cannot be exported; therefore all study and identification of faunal materials was done in the field laboratory (Hospet, Karnataka) and at the Deccan College Archaeozoology collection (Pune, Maharashtra). I found a number of reference publications and manuals quite useful for general species identifications: Hillson (1986), Walker (1985) and Schmid (1972). Fetal elements were identified with the assistance of Amorosi (1989), Prummel (1989, 1988, 1987a, 1987b) and scanned images of a fetal *Odocoileus virginiasus* specimen (University of Georgia #3318, courtesy of Susan Scott).

Securely identifying a skeletal element is a crucial component of formulating inferences on cultural patterns of animal use. However, closely related species are often difficult to differentiate based on osteological remains, and similarities may obfuscate interpretations concerning, for example, subsistence emphases on wild versus domestic taxa. Furthermore, biological and ecological variables such as age, sex, climate and nutritional status have profound effects on skeletal development that can further complicate the task of identifying faunal remains. The most secure approach to identifying species relies on comparison with an extensive skeletal reference collection

that includes endemic and foreign animals, and represents multiple ages and sexes (including castrates, for example) (Rea 1986; Chaplin 1965). However, as is the case for analysts working in regions that lack a strong tradition of zooarchaeological research, this type of ideal collection was not available to me during the course of my investigation. Therefore, it is important to briefly discuss my strategies for compensating for the lack of comprehensive reference materials.

First, all the identifications listed in Appendix II have been made in a conservative manner, so that only the most secure level of taxonomic identity has been attributed to any specimen. Reference skeletons housed at Deccan College were used to determine the most precise level of identity that could be attributed to a bone. As such, many remains could only be described to body size ("large, medium, small"), while many others could only be assigned to Order or Family. High species diversity for similarly sized animals has resulted in relative uncertainty for the majority of faunal specimens recovered from Kadebakele (see Appendix I), particularly for bones that lack characteristic landmarks used for identification. However, some non-mammalian Classes (Aves, Reptilia and Osteichthyes) have distinctive skeletal attributes that can be useful in delineating these remains from the mammalian specimens.

Second, I relied on a number of publications and drawings to assist the identification of the Kadebakele fauna. Differentiation of *Ovis*, *Capra*, *Cervus* sp., and *Antilope cervicapra* was based on characters described by Pawankar and Thomas (2001), Boessneck (1969), and Hildebrand (1955), as well as use of the Deccan College comparative collection. Because these genera closely resemble one another, the above-

cited research is based on regionally- or geographically-specific characters for differentiating these animals. As such, comparison with the Deccan College reference collection was invaluable in accomplishing this task. Still, many bones were not definitively identifiable as one of these four species, and were recorded as "sheep/goat/deer".

Last, the reference collection did not clarify species identifications for many animals. This is particularly true in the case of South Indian large bovids, as well as non-mammalian taxa, such as birds, turtles and snakes. While some authors have done important work on describing the osteological differences between *Bos indicus*, *Bubalus bubalis*, *Bosephalus tragocamelus* and *Bos gaurus* (Joglekar et al. 1994; Higham 1968; Olsen 1960), reference to Deccan College comparative specimens demonstrated a rather wide variation between these animals with regard to age and sex. To address, I compiled photos and metrical data collected from large bovids housed at Field Museum of Natural History intended to formulate a method for distinguishing these species (see below). Similarly, identification of birds and reptiles were based on the characters described by Gilbert et al. (1996) , Olsen (1968) and Romer (1966), though I also used photos and metrical data taken from the collections housed at the Field Museum of Natural History and the University of Michigan Museum of Zoology (see below) to move towards more secure descriptions.

Metric and Photographic Database

Preliminary excavations in 2003 demonstrated a significant wild component in the faunal assemblage at Kadebakele (R. Bauer 2003) that could not be adequately addressed

given the limited range of comparative osteological specimens available in India. In order to facilitate more secure species identifications for these animals, and ultimately formulate an increasingly holistic understanding of Iron Age animal use at the site, I began work on a comparative database of species endemic to the Tungabhadra Corridor region. This list was compiled based on observations presented in modern zoological surveys, field guides and the observations of British Colonial zoologists (Menon 2003; Daniel 2002; Ranjit Daniels 2002; Kazmierczak 2000; Grewal 1993; Prater 1971; Pocock 1941; Smith 1933, 1935, 1943; Day 1889). With the permission of the curators of the avian, herpetological and mammalian collections at the Field Museum (Chicago, IL) and University of Michigan Museum of Zoology (Ann Arbor, MI), I collected photographic and morphometric data for both mammalian and non-mammalian taxa (Table 6.1). These photos and measurements were then used while analyzing archaeological specimens in the field laboratory.

Taxonomic Category	# of taxa studied	# of specimens studied
Birds	42	56
Snakes	11	11
Turtles	4	5
Large Bovids	4	4

Table 6.1 Number of taxa and skeletal specimens studied in creating comparative database of South Indian animals (Appendices III, IV and V).

Non-mammalian taxa: snakes, turtles, birds

Few published resources are directed towards differentiating the skeletal remains of small wild taxa (e.g., Gilbert et al. 1996; Olsen 1968), or concerning these specimens in antiquity. In response to this dearth of knowledge, I began a systematic approach

towards identifying species of South Indian snakes, turtles and birds remains by developing a photographic and metric database of certain skeletal elements. I measured and photographed osteological specimens from avian and herpetological species housed at the Field Museum of Natural History (Chicago, IL) and University of Michigan Museum of Zoology (Ann Arbor, MI). This information was used to clarify bird and turtle identifications during the 2005 season, which were the best preserved and most common small taxa recovered at Kadebakele.

The raw metric data are presented as Appendices IV and V. This work is by no means comprehensive for the variety of wild taxa in the region, but focuses on elements and taxa of concern to the zooarchaeologist. For example, among avifauna, the Order Passeriformes (perching birds, such as Jays, Magpies, Orioles, and Robins) are a diverse and abundant group of birds, but tend to be small bodied. As my research explores human-animal relationships through archaeological specimens, I have chosen to focus my comparative database on larger-bodied taxa with skeletal elements more likely to survive diagenetic processes (S. Goodman, personal communication). Therefore, I have not collected data for Passerine taxa.

Large Bovids

More previous research has been done on identifying species of large, domesticated bovids than the aforementioned non-mammalian taxa. Both zebu cattle (*Bos indicus*) and water buffalo (*Bubalus bubalis*) are known domesticates in South Asia during the Iron Age (Higham and Kijngam 1984; Meadow 1984); in addition to being sources of meat, these animals were likely important to subsistence economies for their

milk-producing capabilities and ability to be harnessed as sources of labor. Although these animals belong to different Genera, their bones are often difficult to differentiate (Korisettar et al. 2001). The wild bovids endemic to southern India are the nilgai (*Bosephalus tragocamelus*) and gaur (*Bos gaurus*). The gaur is the largest bovid in the world, and because it belongs to the same Genus as the zebu (*Bos indicus*) their skeletal remains are quite similar. In fact, faunal remains from these two animals have previously been differentiated only on the basis of specimen size (P. K. Thomas, personal communication). Alternatively, the build of the gracile nilgai (*Bosephalus tragocamelus*) resembles that of a deer, and its skeletal remains tend to be distinctive from the two other bovid Genera. The table below (6.2) summarizes some of the relevant information regarding these four large bovid species.

Species	**Height at Shoulder**	**Range of Weight**	**Sexually dimorphic?**
Bos gaurus	165 – 195 cm	800 – 1200 kg	Yes
Bos indicus	124 – 132 cm	150 – 800 kg	Yes
Bubalus bubalis	150 – 190 cm	250 – 1000 kg	Yes
Bosephalus tragocamelus	130 – 150 cm	170 – 240 kg	Yes

Table 6.2 Summary of information regarding large South Indian bovids discussed in the text.

Interestingly, Higham and Kijngam (1984: 353) write: "the basic problem of distinguishing between the bones of water buffalo and cattle … has largely been resolved (Kijngam 1979)….. differences in the morphology have been identified which makes separation possible". The parenthetical citation provided is Kijnam's (1979) unpublished MA Thesis at the University of Otago (New Zealand), which is unfortunately not in wide enough circulation to resolve this issue for most researchers faced with such a

challenge[28]. In fact, Korisettar et al. (2001) discuss the difficulty of differentiating these taxa in the context of South Indian prehistory, suggesting that much early work describing Neolithic ashmound fauna may have obscured the proportion of large, domesticated bovids present therein, as they are described as dominated by *Bos indicus* (also Johansen 2004: 316). Although size differences can be used to differentiate between wild and domestic bovids in some geographical contexts (e.g., Higham and Kijngam 1984; Armitage and Clutton-Brock 1976), this approach is not always reliable because of the overlap between large-bodied wild male and small-bodied domesticated female animals. Furthermore, sub-adult males may be similar in size to full-grown females, and early-fusing skeletal elements would be useless in differentiating the age or sex of these individuals. In addition, reference to body size does not clarify the distinction between domestic buffalo and cattle.

There is little published information regarding the separation of these bovid species. While Olsen (1960) provides good anatomical drawings of characters for distinguishing *Bison bison*, *Bos taurus* and *Bos indicus*, there is no systematic work that can be used to differentiate between *Bos* and *Bubalus*, or separate these from the wild *Bos gaurus* and *Bosephalus tragocamelus*. Using four individuals (two females, one male, and one of unknown sex) curated at the Field Museum of Natural History, I measured and photographed various elements that tend to be preserved and identifiable within archaeological deposits. These modern specimens were considered in addition to published metrics from other archaeological sites (see Appendix III) to investigate

[28] I have not been able to obtain a copy of this text, nor seen it available in any university libraries.

whether metrical correlation could discern species for particular skeletal elements. A comparison of the means (at 95% confidence intervals) for many skeletal portions suggested that, in general, buffalo and gaur tended to have larger dimensions than zebu, while nilgai tended to have smaller ones. A one-way ANOVA test confirmed that zebu was distinctive from buffalo and gaur, although the latter two animals could not be distinguished as two separate groups. As such, no further analysis could be performed on these data, as the strength of the patterns between species does not appear to clarify the extent of individual variation among a species. Indeed, only further research can provide more metrics, which can create a sufficiently large sample size to perform such discernments.

My endeavor was confounded by the fact that individual variation in the size, shape and orientation of landmark characteristics often made identification to species difficult, even after comparison to modern specimens in the Deccan College reference collection. As a result, many bones are only identifiable as "bovid" or "*Bos/Bubalus*". Given this difficulty, I measured all complete dimensions for the indeterminate large bovids in the Kadebakele assemblage (following von den Dreisch 1796) in the hopes that these data can be used in the future to investigate whether metric correlation can be used to distinguish these species from one another (e.g., Shigehara 1994; Armitage et al. 1984). The large bovid metrics collected from Kadebakele, the modern museum specimens, and measurements presented by other researchers for these taxa are presented in Appendix III.

Data Collected

My research is based on an analysis of over 64,000 bones recovered from two seasons of excavation at Kadebakele. These specimens were examined in the EHLTC field laboratory in Hospet, Karnataka and the Deccan College Archaeozoology Laboratory in Pune, Maharashtra. Appendix II contains the raw data collected from the 2003 and 2005 Kadebakele fauna. These bones were sorted in the field as "fauna" and bagged separately from other artifacts; I examined all of the specimens sent to the lab[29], and recorded as many of the following attributes as could be determined for each bone specimen: species identification, skeletal element, proportion of element represented by each specimen (complete, $^{3}/_{4}$, ½, ¼ or >¼), weight of specimen (in grams), cultural modification (butchering marks, modification), individual characteristics of the animal (age class, sex, pathologies) and evidence of depositional history (mineral concretions, spiral fracturing, gnawing, burning). Metric data have been used to discriminate between closely related species (Shigehara 1994; Armitage et al.1984) and make sex determinations (Higham and Kijngam 1984; Armitage and Clutton-Brock 1976) in some cases. Given this potential, all elements from Kadebakele with complete dimensions (following von den Driesch 1976) were measured and recorded. These measurements can

[29] However, not all faunal specimens were correctly identified in the screen and some were erroneously included with other artifact bags. Bone specimens encountered in ceramic analysis were sent for faunal analysis thereafter. I was able to code 100% of the mis-sorted specimens identified from the 2003 ceramics; from 2005, I analyzed 100% of the mis-sorted bones from Block A and the Middle Terrace, and 25% of those from Block B (9 of 36 bags) and the Southern Slope (15 of 60 bags). In general, these bags were small and contained between one to 25 fragments; none of these specimens could be identified beyond size class. The data collected from these mis-sorted bones have been integrated into the master list of faunal data from Kadebakele (Appendix III).

be found in the "comments" column of the specimen in the Master Faunal List (in Appendix II).

The faunal assemblage at Kadebakele can be described as 'identifiable' or 'unidentifiable' specimens. Identifiable bones are those which can be identified *at least* to taxonomic Class or body size; 'unidentifiable' refers to those specimens too fragmentary to be identified to either body size or Class. In most cases, bones could be identified at least to Class (Mammalia, Aves, Osteichthyes, Reptilia), and in many cases to body size as well (small, medium and large). However, skeletal element could not always be discerned, and many have simply been described as 'indeterminate'; these fragments were weighed but not counted. In most cases, the general skeletal region that a specimen represents could be described. The following table (6.3) describes part categories for identifiable and unidentifiable ("indeterminate") bones for all regions of the animal skeleton.

Head	Portion	Identifiable?	Bones included
	Skull		
		Identifiable	Skull bones, including maxilla, excluding teeth
		Indeterminate	Fragments of skull bones, excluding teeth
	Horns/Horn cores	Identifiable	Horn cores and fragments
		Indeterminate	Very small horn core fragments
	Mandible	Identifiable	Mandible, excluding teeth
	Petris Temporal	Identifiable	Petris Temporal bones
		Indeterminate	Fragments of above
		Indeterminate	Mandibular fragments, excluding teeth
	Teeth	Identifiable	Complete, or fragmented teeth
		Indeterminate	Very small fragments of teeth
Axial			
	Vertebra	Identifiable	Axis, atlas, cervical, thoracic, lumbar, caudal, "rib/spine"
		Indeterminate	Fragments
	Rib	Identifiable	Complete or near-complete ribs, "rib/spine"
		Indeterminate	Fragments
	Pelvis	Identifiable	Pelvic bones and sacrum
		Indeterminate	Fragments of above
Limb			
	Forelimb	Identifiable	Scapula, humerus, radius, ulna, long bone shaft
		Indeterminate	Fragments of above
	Hindlimb	Identifiable	Femur, tibia, fibula, long bone shaft
		Indeterminate	Fragments of above
	Feet	Identifiable	Metacarpals, metatarsals, phalanges, carpals, tarsals, sesamoids
		Indeterminate	Fragments of above
Unidentifiable			
		Indeterminate element	Fragments not identifiable to skeletal element

Table 6.3 Part categories for portions of the skeleton (following Zeder 1991, Table 6).

For bones of the head, I have used the generic term 'skull' when more precise identification was not possible. Teeth and tooth fragments have been separated from the other bones of the skull and recorded as "tooth" when more precision is not possible. If specific elements of the axial skeleton could be identified, vertebra, ribs and pelvic elements were recorded as such; however, many bones could only be recognized as either

portions of a rib or vertebral spine, as were recorded as "rib/spine". Within the appendicular skeleton, elements were identified whenever possible. However, fragmentation often produced long bone shafts that could only be described as such. Given the diverse wild and domestic fauna found in the region (Appendix I), and the often fragmentary nature of faunal assemblages, inferences regarding animal use strategies based solely on size-class data are limited.

Among types of evidence for cultural modification or use of bones, specimens bearing evidence for heat exposure were most common within the Kadebakele assemblage (22% of the assemblage showed signs of burning). These specimens were described as carbonized (black), partially charred, or calcined (grey/white). If butchering or cut marks were observed, they were recorded as either "cut marks" (small notches visible on bone surface) or "hack marks" (a bone that has evidence of being cut through entirely). A few specimens displaying spiral fracturing patterns were noted, suggesting breaking of the diaphyses while the bone was still wet, or "fresh" (14 of 64,414, or 0.02%). If mineral concretions were observed on specimens (or more commonly, among all bones excavated within a level), I have recorded the observed weight of the specimen, and noted an approximate of extra weight provided by the mineralization. Worked bone from Kadebakele included bone ornaments and tools (n=28); these were inventoried separately (figure 6.1), and are not included in my study, although some specimens were not recognized as modified bones in the field. These fragments often bear only slight modifications (figure 6.2), and are described within the faunal assemblage, and included here within my analysis. Details on the cultural modification of the specimen are listed

under the "comments" column in Appendix II.

The skeletal remains of an animal often bear testament to its life and death. I estimate an individual's age at death based on fusion data and tooth wear. Thus, a bone's fusion state has been recorded when observable ("fused", "fusing", "unfused"), and tooth wear stages recorded for *Bos*, *Ovis/Capra* and *Sus* based on Grant (1982). In the absence of a reference sample of known-age animals from the region (Grant 1982; Grigson 1982a; Payne 1973), I have opted to rank age categories to one another rather than assign absolute ages to the individuals in the assemblage. Often injuries sustained during life cause osteological changes in the skeleton. My analysis focuses on identifying lesions often associated with trauma or degeneration of joints (exostosis and bony spurs). Pathologies such as dental disease and developmental defects were not observed in my examination of the archaeological specimens from Kadebakele, and are therefore not considered in my study (see Murphy 2004).

As described above, faunal assemblages are often fragmented to the point that species and element identifications are limited, and methods of quantification are necessary to describe the nature of the assemblage. Measurements such as NISP (number of identified specimens), MNI (minimum number of individuals), MNE (minimum number of elements), MAU (minimum animal unit) and biomass are employed to describe an assemblage. These methods of quantification can address, for example, the abundance and diversity of taxa, the presence of body parts, and methods of processing animal carcasses (see Lyman 1994). However, zooarchaeological literature is replete with critiques and corrections of MNI (Grayson 1979, 1978, 1973; Hesse and Perkins 1974;

White 1953), and there is some consensus this calculation does not provide a more accurate picture of animal use than unaltered counts do (Uerpmann 1973: 311). This is particularly true for asymmetrical animal such as snakes, turtles and fish, which tend to be represented by vertebrae, carapaces fragments or scales; MNI estimates based on their remains will always be low, especially compared to the NISP counts (Reitz and Wing 1999: 197). Furthermore, MNI values tend to provide information on the procurement of animals, and inadequately address patterns of consumption and discard.

Given these considerations, bone counts can provide a clear measure of relative proportions of species, so long as the data have been examined for sources of bias, such as differential preservation or different skeletal composition of taxa (Zeder 1991: 88). Thus, my interpretations of patterning in the faunal assemblage of Kadebakele are based on raw counts and NISP values.

I have presented the above information in order to provide transparency regarding my interpretations of the Kadebakele faunal assemblage, presented in the following chapters. However, it is imperative to consider what kinds of interpretations can be founded upon the classes of data collected from this study. Decades of research have demonstrated that archaeological data are not without biases, and cannot be considered reliable without understanding what factors affect the constitution of the recovered assemblage. These biasing factors may be systematically instituted by research design and methodology, as well as the result of taphonomic agents.

6.3 Taphonomic Considerations

Beginning with Brain's (1969) critical assessment of the osteodontokeratic industry, the field of taphonomy has provided crucial insights into the patterning of material cultural which fuels archaeological analysis. Taphonomy is generally understood as "the study of the transition, in all details, of organics from the biosphere into the lithosphere or geological record" (Lyman 1994:1). Specifically, taphonomy has focused very heavily on the effects of biotic and physical agencies on bone (Tobias 1989), drawing attention to the complexity of site formation processes (Schiffer 1987) and the impact of excavation strategies on recovery of materials (Hesse 1995: 203). Bones are considered useful for this endeavor as they are uniformitarian[30] materials, assumed to respond to stress consistently over time; that is to say, modern experiments on bone are often used to make inferences about how ancient bones would have been affected by these processes.

Actualistic studies infer the nature of past events by analogy with observable processes (Lyman 1994:503) and inform taphonomy by linking assemblages to cultural and diagenetic processes based on principles of uniformitarianism. These studies (Munson 2000; Binford 1981, for example) have successfully specified some causal linkages between the action of taphonomic agents on bones and the accompanying

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[30] "Uniformitarianism" as phrased by Lyell is associated with the notion of gradualism, which suggests that rates of change have been uniform throughout time (as opposed to "catastrophism", for example), and that natural laws are invariant in time and space. In the fields of zooarchaeology and taphonomic studies, this concept is used to describe materials that can be used to associate modern results with particular modern processes, ultimately in an attempt to link archaeological materials to particularly taphonomic processes (Lyman 1994:47).

physical results. This in turn helps archaeologists recognize the effects of taphonomic agents and address the biases of the archaeological record. However, the problem of equifinality has not been solved by taphonomic studies, as the exact taphonomic agent exerting a force, or the specific context of the interaction itself, is not discernable through faunal materials. The issue remains that many contexts or agents can produce a similar trace on bone (Gifford-Gonzales 1991:228), and multiple lines of evidence may be necessary to delineate relationships between the effects of taphonomic agents and archaeological material.

Taphonomic Considerations at Kadebakele

The robusticity of archaeological interpretation ultimately rests upon the strength of the dataset; as such, one must consider the taphonomic agents at work in shaping an archaeological assemblage. The following discussion of taphonomy at Kadebakele is directed at determining which classes of faunal data form the most reliable bases for interpretation. Specifically, I focus on examining biases resulting from recovery methods[31], the deleterious effects of density-mediated attrition, and the effects of post-depositional forces on fragmentation.

<u>Recovery Methods: Screening and Flotation</u>

In the field, sediment was collected for flotation in order to sample for materials that would not otherwise be recovered by screening deposits (such as macrobotanical remains); towards this end, at least two liters of sediment were taken from most features

[31] While recovery methods may fall outside the scope of the term 'taphonomy', the methods used to recover archaeological data must be considered as possible sources of bias. Therefore, I will consider recovery strategies in this section, under the guise of taphonomic considerations.

and numerous levels excavated at Kadebakele. In order to gain a finer resolution of specific contexts than bulk screening (using 1/8 inch mesh) could provide, flotation samples were collected using 1/16 inch mesh (heavy fractions) and cloth (light fractions). I hand sorted each of the flotation samples discussed below.

Some of the sediment collected for flotation over the two seasons of excavations was passed through a flotation device; only a small proportion of the heavy and light fraction materials from sampled contexts was available for analysis prior to the end of the 2005 season. Thus, I attempted to approach available samples in an efficient and productive manner by examining both the light and heavy fractions from a handful of contexts that demonstrated good recovery of smaller taxa from screened deposits (Southern Slope, level 18 & Feature 3; Block B, feature 13). I observed that these light fractions were devoid of faunal specimens and therefore decided to focus my analysis of flotation samples on the heavy fractions from features excavated in 2005, as well as one level with very high faunal density (Southern Slope unit, Level 18). In total, 23 heavy fraction contents were examined during the 2005 analysis season; most are from features excavated in 2005, while two samples represent excavated levels.

A comparison of fauna from screened versus flotation recovery can be used to determine possible size-bias in the screening of deposits. The table below (6.4) provides a side-by-side comparison of the contents of some assemblages (the heavy fraction data are in bold, the contents of the screened assemblage are not). Several proveniences were excluded from this comparison because the entire contents of the feature were collected for flotation, and there is no comparable screened recovery for these proveniences. In the

table below, mass (grams) and percentage (to nearest one percent) of total mass in various taxonomic categories are presented. Large mammals and medium mammals are considered as one category of specimens, as these remains are large and tend to be recovered through screening. Small mammals, birds and herpetological species (amphibians and reptiles, excluding turtles) are also combined into one category, as these bones are small and could more easily be missed in screening. Furthermore, when fragmented, these specimens often resemble one another and cannot necessarily be discerned to the level of Order. Turtles and fish bones are presented as separate categories as these remains are often distinctive to Order.

Recovery	Locus	L/M mamm	Sm/Bird/Reptile	Turtle	Fish	NISP	Indet
Screened	SSF1L1	824 (76%)	1 (>1%)	0	6 (1%)	1063	253 (23%)
Fraction	SSF1L1	166 (84%)	0	2 (1%)	0	269	30 (15%)
Screened	SSF3L1	1527 (86%)	17 (1%)	0	0	1166	241 (13%)
Fraction	SSF3L1	109 (74%)	0	0	0	261	39 (36%)
Screened	SSF3L2	666 (79%)	7 (1%)	0	0	597	170 (20%)
Fraction	SSF3L2	88 (85%)	0	0	2 (2%)	98	14 (13%)
Screened	SSL18	3251 (75%)	10 (>1%)	5 (>1%)	2 (>1%)	1470	1068 (25%)
Fraction	SSL18	46 (72%)	0	0	0	116	18 (28%)
Screened	BF14L2	70 (97%)	3 (5%)	0	0	57	2 (3%)
Fraction	BF14L2	15 (88%)	0	0	0	35	2 (12%)
Screened	BF13L1	322 (83%)	3 (>1%)	1 (>1%)	0	149	60 (16%)
Fraction	BF13L1	8 (80%)	2 (20%)	0	0	18	<1 (<1%)
Screened	BF12L1	889 (89%)	13(1%)	0	0	302	97 (10%)
Fraction	BF12L1	11 (85%)	0	0	0	15	2 (15%)
Screened	BF12L2	439 (81%)	3 (>1%)	1 (>1%)	0	282	101 (19%)
Fraction	BF12L2	8 (80%)	0	0	0	29	2 (20%)
Screened	AF11L1	31 (100%)	0	0	0	34	<1 (<1%)
Fraction	AF11L1	2 (100%)	0	0	0	9	<1 (<1%)
Screened	AF1L1	32 (91%)	0	0	0	57	3 (9%)
Fraction	AF1L1	143 (94%)	0	0	0	79	9 (6%)

Table 6.4 Comparison of weight (in grams) of various taxonomic categories recovered via screening versus flotation. The percentage of this value as a fraction of the total weight is shown in parenthesis.

The above comparison of assemblages recovered through screening versus flotation demonstrates that no consistent proportional differences can be observed between these recovery methods. In fact, screened and floated deposits have nearly identical proportional constituents. In some cases, heavy fractions contained a slightly higher percentage of fish, small mammal, bird, turtle and fish remains than screened deposits. However, there is no consistent pattern of taxonomic exclusion in screened deposits as compared to flotation recovery.

For example, fish remains are particularly at risk of being missed in screening because the skeletal elements are small and less resistant to attritional forces (Wheeler and Jones 1989: 63). However, fish remains were recovered through screening in some contexts, while absent from heavy fractions. Further, the screened deposits and heavy fractions represent the same deposit similarly; this contention is buttressed by the observation that, for most proveniences, the percentage of indeterminate fragments recovered was similar between screened and heavy fraction specimens. Instead of demonstrating a bias in recovery methods, these data support the contention that taxonomic richness and diversity correlate with NISP measurements and are often a function of sample size (Grayson 1984). Therefore, we can assume that specimens recovered through screening are roughly representative of the total recoverable bone from those deposits, and small taxa are not absent from deposits as a result of size-biased recovery methods.

Density-Mediated Attrition

In this section, I consider the unrecoverable part of the life assemblage, which is absent from the observable archaeological context. One factor biasing the preservation of faunal materials is the deleterious impact of carnivore gnawing on animal bone (e.g., Marean et al. 1992; Marean and Spencer 1991; Blumenschine 1988; Kent 1981). Fortunately, this is unlikely to have been a significant factor in the Kadebakele assemblage, as only 9 specimens (0.014% of the total NISP) yielded evidence of carnivore gnawing, and all of these were still preserved intact enough to be tentatively identified to element and approximately to genus (2 *Bos/Bubalus* and 2 sheep/goat/deer specimens). Carnivores such as wild canids, felids and bears inhabit the site environs, but it appears that, in general, these animals were not drawn to the site to scavenge on food remains. Even fewer specimens (n=8, or 0.013%) bore evidence of gnawing by rodents, such as rats, mice, or bandicoots; although rodent burrowing was not uncommon within the archaeo-sediments, the taphonomic impact of rodents on the faunal assemblage appears relatively low.

More relevant to the Kadebakele fauna are the results of bone density studies, which demonstrate that less dense faunal specimens tend to be absent from archaeological assemblages as they are more prone to destructive attritional processes, while structurally dense bones have a higher rate of survivorship (e.g., Lam et al. 1999; Kreutzer 1992; Marean and Spencer 1991; Lyman 1984; Brain 1969). The effects of density-mediated attrition are crucial to interpreting the contents of a faunal assemblage, particularly considering patterns of element distribution and age classes.

Given such insights, it is unsurprising that structurally dense elements such as phalanges, carpal/tarsals and longbone ends are commonly found in faunal assemblages, and it can be challenging to distinguish between signatures of animal-use strategies and the effects of density-mediated attrition. The fact that single elements have varying structural density provides a valuable insight to the effect of density-mediated attrition within the Kadebakele faunal assemblage. Table 6.5 compares the frequency of proximal versus distal ends of three long bones (tibia, humerus, femur); these data imply that attritional forces had some impact to the extent that high density distal ends of the tibia and humerus are twice as likely to be recovered than the low density proximal ends. However, both ends of the low density femur appear to have survived diagenetic processes with some success. In addition, many proveniences at Kadebakele contained other elements with lower bone density (innominate and scapula), which suggests that the attritional forces may not have had a profound site-wide effect on faunal preservation.

Element	**Proximal (NISP)**	**Distal (NISP)**
Tibia	25	42
Humerus	17	44
Femur	45	26

Table 6.5 Frequency (NISP) of high density and low density ends of various long bones.

Attrition is an important consideration given that neonatal/fetal/very young animals have extremely porous, fragile bones and may therefore be underrepresented in an assemblage. At Kadebakele, fetal bones were identified within the assemblage (192 of 64,414, or 0.3%), but were often eroded and/or fragmented, which made secure species identifications, or even body size distinctions, difficult in some cases. Table 6.6 shows

that fetal bones were unevenly distributed throughout the site, as the Southern Slope and North Midden units contained a higher percentage of fetal bones. This may be related to relatively better preservation in these units, where sediments were ashy and less indurated.

	S Slope	N Midden	Block B	Block A	E Upper	Mid Terr
NISP	107	52	20	6	7	0
Percentage	0.38%	0.75%	0.12%	0.07%	0.33%	0

Table 6.6 Distribution of fetal/neonatal specimens within various excavation areas. Raw NISP values and percentage of total specimens from each area are provided.

Given the above discussion of density-mediated attrition at Kadebakele, I do not consider the relatively low incidence of fetal specimens in the faunal assemblage a direct result of density bias. This is particularly true for the North Midden and Southern Slope units, where fragile elements were more likely to be preserved. The fact that fetal remains are uncommon is likely a reflection of animal use strategies, whereby these very young animals were less commonly incorporated into the death assemblage of Kadebakele (age profiles will be explored in detail in Chapter 7).

Fragmentation

Some scholars have used fragmentation data to speak of cultural practices of cooking and food preparation (e.g., Russell 1999), and this will be further explored in Chapter 8. For the moment, however, it is imperative to understand how post-depositional factors such as trampling, weathering, and plowing can also affect the fragment size of archaeological deposits, and thereby the quality and quantity of information that these materials can provide. Unfortunately, the problem of equifinality

cannot be ignored; in most cases, the agent responsible for fragmentation cannot be easily discerned through observing a faunal specimen. As a way of delineating the effects of post-deposition forces from anthropogenic practices such as marrow extraction, cooking and discard, I explore differences in fragment size between various areas of the site and contexts.

Given the diversity in body size of animals in the Kadebakele assemblage, my comparison includes only data for large- and medium-size mammals aims to illustrate potential differences in impact of fragmentary forces. I did not measure the dimensions of any bone fragments; instead, the weight of a bone will serve as a proxy for its size. Thus, degree of fragmentation will be assessed assuming that fragmentation of one skeletal element results in many smaller pieces of bone, which in turn, have less individual mass. Calculating the average size of a bone fragment from an excavated context can be accomplished by dividing the total bone weight by the number of total specimens by for that level (total grams/ total NISP). The table below (Table 6.7) presents the average fragment weight (in grams/fragment) [32] of large- and medium-sized mammal remains by area and excavated level at Kadebakele. If these animals are distributed evenly across the site, and across all units and levels, the calculations in the table can be assumed representative of increased or decreased degrees of fragmentation. However, this assumption does not hold, and differences in distribution of these animals across units as well as between levels have cultural, rather than taphonomic significance; these variations will be the focus of the following two chapters.

[32] A higher value indicates a larger, more massive fragment.

LEVELS	Block A	Block B	S. Slope	N Midden	E Up Terr	Mid Terr
Level 0	n/a	0.68	0.77	0.35	2.00	0.32
Level 1	0.67	0.61	0.86	2.14	0.40	1.32
Level 2	0.65	0.54	1.04	1.42	0.60	3.96
Level 3	0.69	0.77	1.22	2.10	1.39	2.27
Level 4	0.79	0.69	1.00	2.04	0.50	1.25
Level 5	0.87	1.34	1.42	2.02	0.75	2.00
Level 6	0.75	1.59	1.19	2.53	0.92	1.00
Level 7+	0.78	2.08	1.26	2.56	2.61	0.33
Features	1.19	2.00	1.01	3.05	n/a[33]	n/a

Table 6.7 Average fragment weight (in grams/specimen) for remains of large- and medium-sized mammals within levels and features throughout the site.

That said it will suffice for the time being to state that overall, degree of fragmentation tends to decrease with depth of deposit. In other words, larger fragments are recovered from lower levels, where they are likely protected from the effects of fragmenting forces. Uppermost deposits in the indurated zone of soil formation tend to be the most fragmented and subject to attritional forces, and least likely to be identifiable to species or body size. Features contexts also yielded larger fragments of bone, perhaps because these proveniences were also protected from fracturing forces. Some of the values in Table 6.7 may be unrepresentatively large because some levels bore mineral concretions, which skewed values of mass for these specimens. In addition, the values for fragment size in the Middle Terrace are different than the upper terrace units because culturally sterile soil was encountered following level 7; levels 5 and higher in the Middle Terrace contained very little faunal material.

[33] In this unit, the entirety of all the features encountered were collected for flotation. Unfortunately, these samples have yet to be processed and were unavailable for analysis.

Finally, it is relevant to briefly note that several levels and features produced conjoining elements, as well as multiple body parts from the same taxa. These proveniences are likely to represent discrete depositional events that have survived post-depositional forces such as bioturbation to remain relatively intact. The specific contents and significance of these specimens will be treated in detail in Chapter 8

Zooarchaeological Interpretations and Taphonomy at Kadebakele

Given the taphonomic considerations and analytical procedures presented in this chapter, we can deduce which types of faunal data are the most reliable and robust. First, our recovery methods do not appear to have introduced systematic size-bias into the faunal assemblage. Therefore, the frequency and proportion of small taxa observed in the assemblage is likely to approximate the total number of specimens preserved in the archaeological record. Furthermore, the effects of attritional factors, such as carnivore gnawing, may not have had significant impact on the contents of the Kadebakele assemblage. Fetal animal remains, as well as less-dense skeletal elements, are present in the assemblage. The frequency and distribution of these specimens could be considered reflective of animal-use strategies rather than deleterious forces; however, there is some evidence that dense skeletal portions were twice as likely to survive as low-density long bone ends. Midden deposits of the Southern Slope and North Midden excavation areas contained the highest percentage of fetal animal remains, and it is likely that specimens from these areas are better preserved that those from more indurated sediments. Data regarding fetal/neonatal animals are significant, as they allow discussions of herd management strategies and differential consumption of animals of various ages.

Good preservation, as well as effective screening, also allows for the recovery of small-bodied taxa such as birds, fish, herpetological specimens and small mammals. The array of such wild animals will provide insight into hunting and wild-fauna exploitation by the inhabitatants of Kadebakele. In sum, it appears that excavation areas at Kadebakele provide good preservation for bone specimens, and differential contexts for delineating patterns of animal use as they relate to the use and abandonment of built structures (habitational and megalithic), as well midden formation.

6.4 Chapter Summary

In order to provide as much analytical transparency as possible, I have presented my methodology in detail herein. The culmination of my efforts is presented in Appendix II; the analysis of this assemblage will be presented in the following two chapters. While much of the faunal record consists of specimens that cannot be identified to species level, there is still an abundance of data that can be collected and used to examine patterns of animal use and social differentiation at Kadebakele. A brief consideration of taphonomic forces suggests that preservation is generally good at the site, though slightly better in midden deposits. Bone specimens from features and lower strata are most likely to have been protected from fragmenting post-depositional forces, and tend to contain higher proportions of identifiable bones. Furthermore, no systematic size bias appears to be skewing the proportion of small taxa recovered through screening.

With these considerations in mind, many aspects of animal identity can be interpreted as signatures of animal use at Kadebakele. In the following chapter, I discuss

the distribution of species across the site, as well as age and sex profiles of animal included in the assemblage. These data will be used to understand dimensions of hunting and herding, secondary products exploitation, as well as shed light on the contribution of non-mammalian taxa to Iron Age subsistence strategies. In addition to addressing subsistence needs, I submit that such aspects of animal use are potential avenues of social differentiation and distinction.

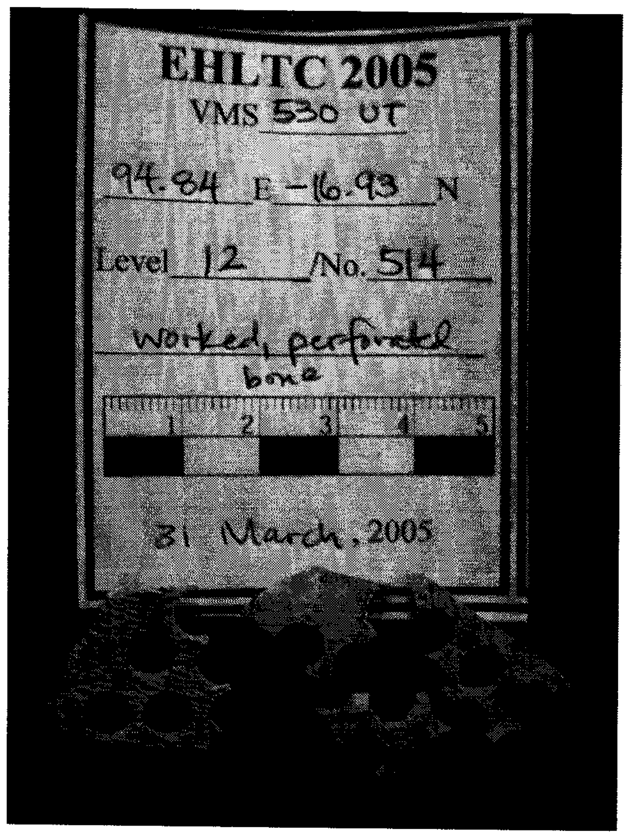


Figure 6.1 – Perforated bone (possibly bead-production waste) recovered from Kadebekele.

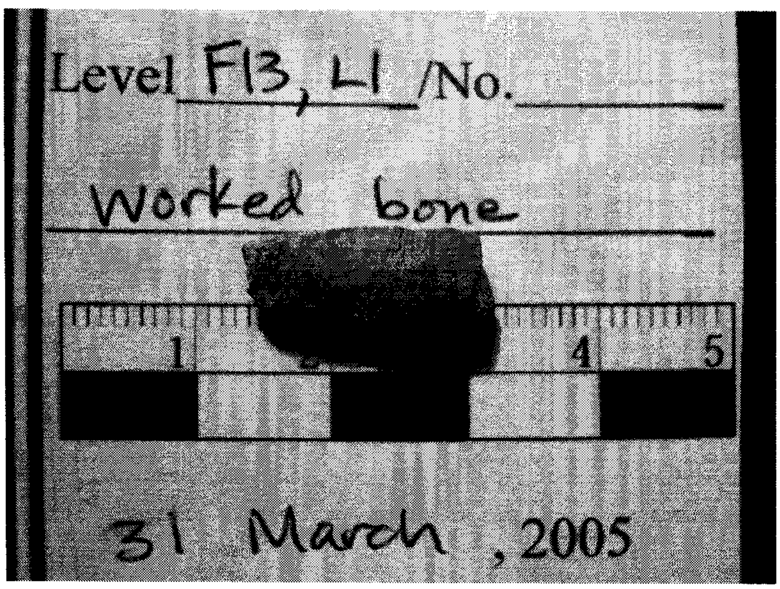


Figure 6.2 – Worked bone identified within Kadebakele faunal assemblage.

Chapter 7: Results I – Hunting and Herding at Kadebakele

7.1 Introduction

In this chapter, I present information on measures of animal identity at Kadebakele; specifically, I discuss the range of species present in the faunal assemblage and the sex and age at death of some of these individuals. Here, the primary analytical unit will be the site of Kadebakele as a whole; that is, the entirety of the faunal assemblage will be considered in discussing species spectrum, as well as the age, sex, and pathologies of animals in the assemblage. Detail on variation between areas of the site and depositional contexts will be considered in the following chapter.

Demographic information such as species, age and sex are central to understanding patterns of animal use in the Iron Age, specifically the practices of hunting and herd management. I argue that faunal data from Kadebakele speak to a wide range of animal use strategies, including small game hunting, stock breeding, and secondary products economy. These practices entail particular skills and levels of time investment, and perhaps map onto various axes of distinction in society. Furthermore, I present the possibility that the procurement of small game can be contrasted with the slaughter of larger domestic stock with regard to the amount of meat produced, and may indicate provisioning for household versus communal consumption.

7.2 Species Spectrum: diversity and abundance

The identification of faunal specimens can provide information on the relative abundance of wild versus domesticated taxa, mammalian versus non-mammalian taxa, and the specific composition of domestic herds. These data can be used to address practices of herding and pastoralism, as well as the exploitation of wild species through hunting, trapping and fishing. Clearly, such behaviors have different social implications in terms of time/labor investment, technologies, skills, and perhaps division of labor.

Data from Kadebakele

It has been suggested that the importance of hunting was reduced following the Neolithic Period (Thomas and Joglekar 1994:197). However, data from Iron Age sites indicate that animal economies were diversifying throughout the Indian peninsula during this time, with an increasing exploitation of wild animals such as birds (Thomas 1993, 1992a). Similarly, at Kadebakele, the faunal assemblage indicates a reliance on an array of wild animals; Table 7.1 lists the species and corresponding number of specimens recovered from Kadebakele. Hunted prey included wild cervids (chital and sambar), bovids (gaur, blackbuck and nilgai), felids (panther) and small carnivores such as martens and civets (see Table 7.1 below). While domesticated pigs are documented in Eastern Asia as early as 6000 BC (Jin and Flad 2002), wild forms have persisted throughout the peninsula until the present day (Prater 1971) and both domesticated and wild forms have been identified in faunal assemblages from prehistoric sites in peninsular India (i.e., Thomas 1984; Clason 1974, 1975). While pig remains were not uncommon at

Kadebakele, it is unclear whether they definitively represent either wild or domestic forms.

Animals such as mongooses, porcupines and rodents were also present at Kadebakele; these taxa tend to be attracted to human settlements by potential food sources. If hunted, they would have been easily procured nearby the settlement area. An array of birds were also identified in the faunal assemblage, including peafowl, duck, junglefowl, and eagle. Riverine fauna include both hard-shell (semi-terrestrial) and softshell (aquatic) turtles, and fish ranging in size up to 70 centimeters in standard length. A variety of snakes and lizards of various sizes were also identified within the Kadebakele assemblage.

Taxonomic Category	**NISP**
Fish	
Perch-type fish (Order Perciformes)	1
Ritha/catfish (Order Siluriformes)	34
Fish (species indeterminate)	225
Snakes/Lizards/Turtles/Amphibians	
Trinket Snake (*Elaphe helena*)	3
Snake (species indeterminate)	53
Indian monitor lizard (*Varanus salvator*)	7
Skink (*Mabuya* or *Lygosoma* sp.)	1
Lizard (species indeterminate)	30
Indian Tent Turtle (*Kachuga tentoria*)	5
Deccan Soft-shell turtle (*Aspideretes leithii*)	65
Turtle (species indeterminate)	163
Frog/Toad (Order Anura)	3
Birds	
Indian Peafowl (*Pavo cristatus*)	2
Eagle (*Aquila* sp.)	1
Woodpecker (*Dendrocopos* sp.)	1
Lesser Whistling Duck (*Dendrocygna javanica)*	3
Junglefowl (*Gallus gallus*)	4
Bird (species indeterminate)	566

Mammals	
water buffalo (*Bubalus bubalis*)	18
zebu (*Bos indicus*)	155
zebu or water buffalo (*Bos* or *Bubalus*)	394
goat (*Capra* sp.)	69
sheep/goat (*Ovis*/*Capra*)	79
wild or domestic pig (*Sus* sp.)	45
domestic horse (*Equus caballus*)	1
(probably) wild dog (*Canis* sp.)	10
Gaur (*Bos gaurus*, based on size of specimen)	1
Nilgai (*Bosephalus tragocamelus*)	1
Sambar (*Cervus unicolor*)	7
Chital (*Axis axis*)	12
Blackbuck (*Antilope cervicapra*)	12
Leopard or Panther (*Panther* sp.)	1
Indian Hare (*Lepus nigricollis*)	20
Indian Porcupine (*Hystrix indica*)	4
Small Primate (cf. *Macaca*)	1
Flying Fox (*Pteropus giganteus*)	1
Mongoose (*Herpestes edwarsii*)	12
Wild cat (*Felis* sp.)	2
Nilgiri Marten (*Martes flavigula*)	1
Shrew (*Suncus* sp.)	1
Rat/Mouse (*Rattus* or *Mus* sp.)	248

Table 7.1 List of species and number of identifiable specimens (NISP) found at Kadebakele.

As stated in Chapter 3, small wild animals such as rodents are often overlooked as potential food sources (Brothwell and Jones 1978; den Hartog and de Vos 1964). The majority of small mammal remains from Kadebakele were rat or mouse (*Rattus* or *Mus*) specimens, and a consideration of their depositional contexts and skeletal completeness, however, does not support the suggestion that they were consumed by humans. These specimens were often found in contexts clearly affected by rodent burrowing, and in deposits containing high skeletal representation. Such lines of data indicate that these burrowing rodents died in their homes sometime after the Iron Age, and are likely intrusive to archaeological deposits. Therefore, these animals are not considered within

the category of "wild mammals", as they may represent post-depositional additions to the assemblage. Instead, they are classified here as "commensal mammals".

Assessing the range of species from archaeological deposits is best accomplished by referring to measures of taxonomic diversity, generally expressed in terms of species 'richness' and 'evenness'. Species richness is the total number of taxa in each assemblage, while evenness is a measure of the proportion of individuals of a particular species within a site (Lupo and Schmitt 2005: 343). Statistical measures of significance are important for discerning whether differential species representation reflects animal use or sampling errors. Towards this end, ecologists use a calculation of diversity to describe the heterogeneity of an ecological system. The Shannon-Weaver index (Shannon and Weaver 1949) is used to measure "equitability" (V'), that is, the evenness of with which species are represented in a sample, as well as "diversity" (H'), the amount of uncertainty of predicting the identity of an individual selected randomly from the sample (Reitz and Wing 1999: 105).

The Shannon-Weaver values for the Kadebakele assemblage indicate a high diversity (H'=3.048) and moderate equitability (V'=0.920, a value of 1.00 represents even distribution). These calculations indicate a relatively even distribution of taxa, which suggests that hunted wild animals were an important contribution to subsistence, as was the raising and slaughtering of domesticates. In addition, calculated using MNI values, the Shannon-Weaver index does not adequately consider the large number of bird, fish and turtle specimens that could not be identified beyond Order or Class. Thus, the importance of non-mammalian taxa is likely to be understated by Shannon-Weaver

values. Other measures of relative abundance can be used to further asses the relative importance of these animals at Kadebakele.

Taxonomic category	Iron Age NISP[34]	Kadebakele NISP	Kadebakele weight (grams)	Kadebakele density (g/L)
Wild mammals	220 (9%)	86 (4%)	333 (3%)	0.01
Domestic mammals	297 (13%)	149 (7%)	594 (5%)	0.02
Cattle	1664 (72%)	567 (26%)	10679 (86%)	0.38
Birds	117 (5%)	577 (26%)	418 (4%)	0.01
Turtles	1 (<1%)	233 (10%)	203 (2%)	0.007
Snakes/Lizards/Frogs	6 (<1%)	97 (4%)	70 (<1%)	0.002
Fish	4 (<1%)	260 (12%)	90 (<1%)	0.003
Commensal	12 (<1%)	248 (11%)	25 (<1%)	0.0009

Table 7.2 Relative frequency of taxonomic categories as indicated by NISP values for peninsular Iron Age sites compared to Kadebakele. Relative abundance of each taxonomic category as a percentage of the total assemblage is provided in parenthesis. Weight and density values are also provided for the Kadebakele assemblage.

Raw NISP counts can used to compare the relative frequency of taxa in the Kadebakele assemblage, as well to contrast this assemblage with contemporaneous deposits in the Indian peninsula. The data in the table above show that remains of birds, turtles and fish were each more abundant in the assemblage than wild mammals, and the combined abundance of non-mammalian taxa (40%) exceeds that of all domesticates (cattle and domesticated mammals, 33%). These values emphasize the importance of avifauna and riverine fauna to the Iron Age diet at Kadebakele. Domestic zebu and water buffalo remains are as common as bird at Kadebakele, while other domestic mammals –

[34] The sites included here are Veerapuram (Thomas 1984), Hallur (Alur 1971), Nevasa (Clason 1975), Palavoy (Rami Reddy 1976); Brahmagiri (Nath 1968), Bhagimohari (Thomas 1993), and Kurnool (Miracle 2005).

though relatively more common than wild mammals – constitute a much smaller proportion of identified bones. These data contrast markedly with other analyses of Iron Age sites (presented in Table 7.2 above), which show domesticates comprising 85% of the total identified specimens and cattle remains predominating overall. Interestingly, the relative proportion of wild mammal specimens at Kadebakele is similar to, if not slightly lower than, other Iron Age sites.

Although the above table demonstrates a stark contrast between the number of specimens of non-mammalian wild taxa at Kadebakele and other Iron Age sites, this comparison of raw counts must be considered carefully. First, it is important to keep in mind that the low incidence of non-mammalian specimens in other Iron Age assemblages is also partly an artifact of hand-collection recovery methods. Table 7.2 shows that bone weight values from Kadebakele resemble the proportional representation of species calculated by NISP from hand-collected assemblages. Such a parallel suggests that the relative proportion of mammals is quite similar to other South Indian Iron Age sites, but with the addition of smaller taxa recovered through screening. Second, variability in the number of identifiable elements between taxa likely explains the higher number of specimens at Kadebakele identified as wild reptiles, fish and birds. This level of identification can be accomplished based on a fragment of an element, such as a vertebra or long bone. Mammals, however, cannot be identified as domesticated or wild without a positive identification of species, usually based on specific portions of specific elements; the number of specimens that fulfill these requirements is much lower, and this is reflected in the relative frequency of these taxa.

Alternative measures of relative frequency may help to address this bias; bone weight (Uerpmann 1973: 310) and faunal density will be considered here. The assumption behind using bone weight values is that the amount of meat carried on a bone is proportional to the weight of that bone. While not without its problems (Reitz and Cordier 1983), this approach is much more straightforward than calculations that attempt to estimate actual poundage of meat (biomass) or the precise numbers of animals within an assemblage (MNI, and MNI-derived calculations; Zeder 1991: 88). Faunal density is shown above as a calculation based on mass per volume of sediment (calculated as grams/liter), and provides a measure of relative abundance within the archaeological matrix itself.

A comparison of bone weight values for the Kadebakele assemblage suggests a predominance of domestic cattle (which is expected due to their large live mass), but continued relative importance of birds and turtles. Bone density calculations similarly emphasize domestic cattle, and the relative frequency of birds remains comparatively high while turtle density is slightly lowered. Although the contribution of these non-mammalian taxa by weight is greatly diminished, it is still on par with the proportion of domesticated and wild mammals, which is especially impressive given their overall small size in comparison to mammalian taxa. Therefore, measures of abundance suggest that hunting birds and reptiles was central to subsistence activities at Kadebakele; this interpretation is underscored by considering their high NISP values as well as relative abundance by weight and density. Furthermore, the process of capturing these animals requires familiarity with animal behavior and technology of capture in diverse

environments (for example, the modern environs of the site itself include river, flood plain, caves, outcrop, and brush). The contents of the Kadebakele assemblage reflect substantial effort put towards this end, resulting in hundreds, and perhaps thousands, of acts of capture.

7.3 Herd Composition: sex and age

The keeping and raising of domestic stocks necessitates knowledge and practices that differ from other types of subsistence production, as managing the interests and health of the herd are of prime concern to the herder, as are the costs and benefits of keeping an animal alive versus slaughtering it. I have argued in Chapter 3 that the significance of an animal must be conceived as more than its potential to provide food, as an animal may be valued in many socially meaningful ways; however, the validity of this argument does not preclude the broad significance of production and herd management. That is to say, although many models of animal use adhere to rational-economic frameworks (i.e., Harris 1985; Speth 1983), the biological realities of animal maturation necessarily influence animal-use and management strategies.

Such strategies are likely to differ among domesticates, depending on body size, reproductive rate and productive potential of the animal. For example, Redding (1984) points out that in different environments, diverse strategies and variables are employed to manage herds. As such, we can expect husbandry strategies to vary according to environmental variables, economic relations, and subsistence requirements, among other

factors. Zooarchaeologists can attempt to address herd management because age and sex of a particular species in specific environments can often be ascertained from skeletal remains. In turn, these profiles can provide evidence for socio-cultural processes involved in herd management and secondary products economies. At Kadebakele, the most robust evidence for age and sex come from domestic cattle, caprines (primarily goats), and possibly pig; as a result, only these animals are discussed in further detail here.

Sex Determination

Determining the sex of animals present within a faunal assemblage is central to understanding husbandry practices, secondary product economies, and slaughter patterns. The sex of individual bovids and horses are most reliably determined by examining pelvis morphology; however, the Kadebakele assemblage did not contain adequately large fragments of the pelvis for reliable sex determinations. In the absence of these data, metrics also can be employed because male and female animals are often sexually dimorphic (Zeder 2001; Speth 1983; Thomas 1988; Grigson 1982a; Higham 1968). In fact, Zeder (2001: 67) states that "the sex of an animal is the most important factor determining size". As such, metrical data was collected whenever possible to be used to establish the sex of animals at Kadebakele. Although standard practice indicates that metrics should only be recorded on fused specimens (von den Driesch 1976: 4), Zeder (2001) has demonstrated the potential benefits of including unfused bones in metrical analyses. All bones at Kadebakele were measured, regardless of fusion status, if the standard landmarks for measurement were preserved.

In contrast with Zeder's assertion on the relationship between sex and size, some scholars have argued that sexual dimorphism decreases in domesticated animals compared to their wild progenitors (Meadow 1989; Boessneck and von den Driesch 1978). Further, many have noted that the cultural practice of castration can make sex determination more difficult in certain species. Male animals are castrated for several reasons: to prevent unwanted matings, reduce aggression, and improve meat by increasing fat content (Davis 2000: 374; Ghirotti and Wodyalew 1996: 116-7). Davis (2000) and Grigson (1999, 1982a) suggest various skeletal implications of castration for domestic fauna as means for zooarchaeologists to identify this category of animals in faunal assemblages. Grigson (1982a) notes that patterns of pronounced sexual dimorphism in domestic cattle do not apply to castrated males and that epiphyseal and cranial fusion may be delayed as a result of this practice (also Bartosiewicz et al. 1997: 96; Watson 1978; Noddle 1974; Chaplin 1971). Similarly, Davis (2000) suggests that because of the delay of epiphyseal fusion, long bone growth is prolonged in castrates; as a result, these animals have longer and more slender bones than uncastrated males. Grigson (1982b) and Luff (1994) argue that the morphology of horn cores can be used to identify castrates. Horn cores of juveniles and subadults, however, are often too fragile to survive intact in the archaeological record. While many horn core fragments were recovered from Kadebakele, very few were sufficiently intact; the mass of each fragment was recorded, although dimensional measurements were not taken. Therefore, metrical data will be the most useful approach to identifying castrates, males and females in the Kadebakele faunal assemblage.

Castration may take place early or late in an animal's development, and appears to have different effects on the animal's growth and development. Early castration (prior to two years of age for bulls) is often aimed at improving meat quality and body mass, while later castration (after 3 years for bulls) might be undertaken to maximize muscular development without interfering with an animal's ontogeny (Bartosiewicz et al. 1997: 96); as a result, late-castrated animals are skeletally similar to uncastrated males. Of specific interest to the study of the South Indian Iron Age is the fact that water buffalo do not appear to be markedly affected by castration (Charles and Johnson 1975), while castrated zebu have been observed to grow taller and leaner than uncastrated males (Bagley et al. 1989).

Sex Determination for Cattle

Comparing the distribution of skeletal dimensions within an assemblage has proven to be a fruitful approach to identifying males, females and castrates within an ancient animal population. Fock (1966), Higham (1968) and Thomas (1988) have had success by examining the distribution of metapodial breadth and length measurements. Inadequate comparable metapodial dimensions were recovered from Kadebakele, as only eight elements were measurable and the maximum comparable dimensions is two; therefore, these elements cannot be used in this regard. Measurable phalanges were more commonly encountered in the assemblage, though comparing them to one another is somewhat complicated by the presence of four of each type in the quadrepedal skeleton. However, Higham (1968) and Zeder (2001) use both first and second phalanges to demonstrate dimorphism in populations of cattle and goats, respectively.

The distributions of first and second phalanx dimensions at Kadebakele produced interesting results. A size distribution histogram of first phalanx proximal breadth (n=15) from *Bos indicus*[35] (figure 7.1) does not conclusively demonstrate a dimorphic population; in fact, the distribution more closely approximates a normal curve. A histogram for *B. indicus* proximal breadth of second phalanges (n=15) however, is non-normal, and appears to be slightly skewed to the right (Figure 7.2). The bimodal distribution expected for males and females is not present in either case, and suggests that the Kadebakele assemblage is neither dominated by male nor female cattle. The second phalanx proximal breadth may suggest a sizeable population of females and a range of intermediate- to large-sized males. Both of these distributions may indicate the presence of mid-sized castrates sized intermediately between the two sexes.

The practice of castrating male cattle has important relevance to models of animal husbandry for prehistoric Southern India. Numerous scholars studying Neolithic fauna have suggested that two distinct "breeds" are identifiable through the morphology of the specimens. Allchin (1963:45, 1961:62, 1960:12), Shah (1973) and Paddayya (1975) all document a "tall" versus "massive" form of *Bos indicus* at Neolithic ashmound sites. However, our recent understanding of the effects of castration on animal growth and development may warrant an alternative interpretation of these apparent morphologically distinct *Bos* specimens. I posit that such morphological differences may indicate the emergence of castration as a specific animal management strategy during the Neolithic

[35] The sex of water buffalo (*Bubalus bubalis*) at Kadebakele will not be discussed in this section because an insufficient number of comparable, measured elements (n=4) were recovered. In addition, as previously noted, water buffalo do not respond phenotypically to castration and this practice is more difficult to identify based on archaeological specimens.

period in South India. Unfortunately, no metrics have been recorded on these previously analyzed specimens, and are thus not directly comparable to our current dataset.

Sex Determination for Caprines

Far fewer comparable measurement are available for caprines at Kadebakele, and the metrical analysis of their dimensions holds less promise for identifying the sex of the animals in the assemblage. Using the highest number of comparable dimensions (n=4) for proximal and distal breadth of the second phalanx, weakly bimodal (or non-normal) distributions are produced (Figure 7.3), perhaps indicating the equal presence of male and female caprines at Kadebakele. This distribution stands in contrast to Figures 7.1 and 7.2, furthering the proposition that male cattle at Kadebakele were subject to the practice of castration.

Zeder (2001) and Hesse (1984) have argued that such distribution histograms can be used to estimate the proportion of sexes of goats in an archaeological sample. Unfortunately, the dimension bearing the highest number of comparable measurements at Kadebakele was not presented by either of these scholars, so it is difficult to evaluate the significance of the gap between the clusters of values shown in Figure 7.3.

Age determination

The exact schedule and age at which epiphyseal fusion and skeletal maturation occurs is influenced by an animal's health, diet and ecological context (Crabtree 1990: 162; Grant 1978); in addition, the practice of castration may delay epiphyseal fusion in young males (see above). However, some elements consistently fuse early or late in the process. Because the sequence of fusion is relatively consistent among mammals, it can

be used to establish relative age classes for elements in a faunal assemblage according to documented fusion schedules for individual species (Schmid 1972; Silver 1963). Most researchers provide estimations of fusion as a range of months or years; in most assemblages, each age class is represented by only a few specimens, and the fusion ranges often overlap. Therefore, following Chaplin (1971: 129 – 33, also Reitz and Wing 1999, Table 3.5), I have divided the Kadebakele age groups into early fusing, middle fusing and late fusing elements[36]. These groups roughly correspond respectively to fetal/juvenile animals less than ten months of age, subadults between one and two years of age, and adults over three years of age. Because these absolute ages may vary between animals, I prefer to use terminology referencing relative age categories rather than age in years in order to avoid confusion in comparing age profiles between taxa.

The wild animals in the Kadebakele assemblage were not represented by an adequate number of elements to create a comparison of fusion status; therefore, the table below is limited to taxa for which adequate comparative data was available. NISP values for fused and unfused elements and age categories are given below for domestic cattle (cow and buffalo), caprines (sheep and goat) and pig (wild and/or domestic). The number of unfused versus fused specimens can serve as a proxy for the relative frequency of animals within an age class who were incorporated into the death assemblage and those that survived beyond that age.

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[36] Early fusing elements: distal humerus, distal scapula, proximal radius, acetabulum, proximal metapodium, proximal phalanx. Middle fusing elements: distal tibia, distal fibula, proximal calcaneus, distal metapodium. Late fusing elements: proximal humerus, distal radius, proximal ulna, distal ulna, proximal femur, distal femur, proximal tibia, proximal fibula, vertebral centrum.

Age category	*Cattle unfused*	*Cattle fused*	*Caprine unfused*	*Caprine fused*	*Sus unfused*	*Sus fused*
Early Fusing	5 (8%)	54 (92%)	6 (25%)	18 (75%)	0	2 (100%)
Middle fusing	7 (20%)	27 (80%)	2 (18%)	9 (82%)	2 (67%)	1 (33%)
Late fusing	11 (44%)	14 (56%)	3 (33%)	6 (67%)	2 (100%)	0

Table 7.3 Relative survivorship in three age categories for cattle, caprines and pigs at Kadebakele.

These data suggest that the majority of very young cattle, caprines and pigs survive into sub-adulthood. Proportionally, more young sheep/goat are killed than cattle or pigs. This high percentage may be also a result of kid mortality, which may range between 18 and 45% in domestic caprine herds (Dahl and Hjort 1976: 92). Pigs at Kadebakele appear to be more commonly killed as sub-adults than either caprines or cattle, though very small sample size for *Sus* likely overemphasizes these values. The table above indicates a similarity in survivorship percentages for sub-adult cattle and caprines. Within the category of adult animals, the relative number of animals killed for all three species increases to between 33 and 100% of the total, suggesting that animals were often raised until adulthood before being killed.

Another means of determining an animal's age at death is by examining dental eruption and tooth wear. Eruption is a progression under strict genetic control; in fact, Silver (1963) and Bull and Payne (1982) suggest that ageing is most accurately performed using these classes of data. Teeth begin wearing down after they emerge from the maxilla and mandible, and the correlation between wear patterns and age can be

estimated based on a tooth's surface morphology, enamel wear and exposure of dentine (Hillson 1986: 183 – 7). Although many scholars have championed crown height measurements as a precise means of estimating age (Davis 1983; Klein et al. 1983; Grigson 1982a; Klein 1978), recent research suggests that such measurements tends to obfuscate the presence of both juvenile and older individuals in an assemblage (Enloe and Turner 2002; Pike-Tay et al. 2000). Therefore, age at death estimations for the Kadebakele assemblage have been determined using tooth wear patterns developed for various taxa based on modern specimens (Grant 1982; Grigson 1982a; Payne 1973).

As is the case with fusion schedules, tooth wear data can better establish relative ages of animals than absolute values. Dental ageing methods are not without their problems as eruption and wear, like skeletal maturation, may vary according to an animal's health, sex and diet (Deniz and Payne 1982). It is generally accepted that the most accurate approach to age determination based on tooth wear should reference comparative data from the region, ideally from animals subject to diet and climate similar to past populations (Hillson 1986). Furthermore, an analysis of tooth wear is more effective if a complete mandibular row is present to establish a dental sequence rather than performed on loose teeth (Grant 1978; Payne 1973). Unfortunately, there are no modern studies of tooth wear for Indian fauna to reference, and as in most archaeological faunal assemblages (Reitz and Wing 1999: 185) dental sequences are rare. In fact, at Kadebakele no mandibular wear sequences could be established, although three cattle maxilla with intact molars and premolars and one goat maxilla were recovered.

Unfortunately, wear stages for maxillary teeth differ from the published studies of mandibular dentition, and these elements could not be used to establish dental sequences.

Therefore, estimations of wear and age classes for the Kadebakele assemblage are based on studies by Grant (1982), Grigson (1982) and Silver (1963), and the majority of data represent tooth wear stages for individual teeth. The table below lists the number of cattle, caprine and pig teeth in the Kadebakele assemblage bearing age information.

Age Category	**Cattle**	**Caprine**	**Pig**
Fetal/Juvenile	0	0	1
Subadult	2	5	4
Adult	25	11	0
Old Adult (enamel extremely worn)	2	0	2

Table 7.4 NISP values for cattle, caprine and pig teeth in various age categories.

The tooth wear age data for cattle and caprines indicate patterns similar to those demonstrated by fusion status: younger caprines (subadults) are more often killed than cattle, and both adult cattle and caprines tend to be more commonly represented in the death assemblage than younger animals. In addition, two cattle and pig teeth present evidence for animals of advanced age.

Unfortunately, sample size is insufficient to formulate a compelling argument regarding the use of pigs at Kadebakele. It is possible, however, to speculate that pigs were not domestic stock at this site[37]. The combination of tooth wear and fusion data equally represents the entire range of age classes (except for very young animals),

[37] Thomas (1984:iii) similarly argues that pigs were not domesticates at Veerapuram.

suggesting that subadult, adult, and old adult pigs are all equally likely to be killed. The equal distribution of ages may represent opportunistically killed game animals, rather than slaughter of domestic stock which is more likely involve selection for individuals of certain age or size. In addition, if pigs were domestic animals one would expect at least a residual amount of infant mortality and corresponding fetal/juvenile remains, and this age class is represented by a sole maxillary molar.

It is important to note that fusion and tooth wear data can only provide estimation of age up to three years. Evidence for older adult animals can be provided by ossified costal cartilage (Amorosi 1989:67; Silver 1963) and teeth bearing symptoms of alveolar resorption and periodontal infection (Hillson 1986: 316 – 317). Age at death can also be estimated based on osteological signatures produced by bone remodeling; because bone responds to stress continuously over the course of a lifetime, remodeling often takes place under conditions of repeated physical stress. As such, bony spurs that form on joints indicate both advanced age, as well as repeated exposure to load-bearing skeletal stress (see "Paleopathology" section below). Although costal cartilage cannot be attributed to species, body size class information can be determined in most cases. At Kadebakele, 99 grams of large mammal and 75 grams of medium mammal costal cartilage were recovered from excavation, suggesting animals of advanced age in both size classes. A population of old adult animals is also evidenced by one caprine premolar and six large/medium mammal (probably ruminant) teeth with evidence of resorbed alveolus. The predominance of adult and older domesticates at Kadebakele may be symptomatic of specific animal management strategies, which will be explored in further detail below.

7.4 Herd Management: meat and dairy

Domestic herds can be maintained and managed for the products they provide such as meat, dairy, labor and offspring. As such, the age at which a domesticate is slaughtered can indicate variable impacting a herder's decisions and suggest the importance of the animals in society. It is necessary to review biological information on animal growth and development to assess the possible costs and benefits of raising an animal versus killing it for meat.

Meat Production

The biological differences between animals that compose domestic herds have significance with regard to interpreting the age and sex profiles within a faunal assemblage. While cattle are considered full-grown at four or five years of age (Dahl and Hjort 1976: 167), caprines reach adult size after only one and a half years (ibid: 207). When animals are reared primarily for meat production, they may be slaughtered as they are weaned in order to minimize impact on pasturage or to maximize meat off-take when the animal's growth rate begins to slow; this would occur at two years for cattle (Cockrill 1967: 125) and one year for caprines (Dahl and Hjort 1976: 207). A small percentage of male adults would be kept alive to impregnate the breeding females. The young males not required for reproduction would be particularly vulnerable to slaughter at an early age, while castrates and females are likely to go on to advanced age so long as they remains productive (for labor or dairy, for example) (Hesse 1984: 250).

The Kadebakele data demonstrate, however, that the majority of cattle and caprines survived into adulthood, suggesting that these animals were not raised primarily

for meat production. That is not to say, however, that domesticates were not used for meat at all: fusion data indicate that among cattle and caprines at Kadebakele, approximately half of the adult population survived into advanced age. The other half of this age group was killed during adulthood, perhaps suggesting a preference for full-grown individuals that were slaughtered and consumed on rare (rather than quotidian) occasions.

The proposed scenario is supported by a few lines of evidence. First, small, wild game appears to be an important component of subsistence regimes at Kadebakele; these taxa produce a smaller amount of meat than an adult zebu or goat would. While turtles, birds and fish may be appropriate for small-scale consumption (perhaps at the level of the household), a much larger group of individuals would be needed to adequately deal with a cow or goat carcass, as there is currently no evidence for exchange or storage (roasting, salting, drying) of animal parts. Second, Iron Age herders at Kadebakele tended to raise an animal to adulthood before killing. These decisions may suggest that the benefits of keeping the animal alive until adulthood were more significant than the potential of consuming it at its maximal meat production age, perhaps indicating that the animal itself was valuable. This value need not be exclusively economic, but could be related to social concepts of wealth and resource accumulation (e.g., Bogucki 1993). If so, the killing of one of these animals would have meant the loss of some type of social and/or economic capital. Therefore, these slaughter and consumption events may have been relatively rare, and likely involved communal participation.

Furthermore, the demographic information produced by an analysis of the age and sex of the domesticates at Kadebakele may also bespeak an emphasis on secondary products production, practices not incongruent with the above-hypothesized valuation of older individuals. The use of female animals for dairy production will be discussed in the following section, while the keeping of cattle for draught labor will be considered in the "Paleopathology" section below.

Dairying Economy

All of the females of the domesticated species identified at Kadebakele (zebu, water buffalo, caprines[38]) are milk producing animals. Although there is no definitive evidence for milk production at the site, the presence of aged animals, and possibility that a group of small-bodied female zebu could be identified metrically, warrants the consideration that dairying activities were undertaken. Here, I consider the notion that milk production may have been an important component to the Iron Age subsistence regime, as the dairying potential of zebu, water buffalo and goat articulate in such a way to create a stable base of available milk year-round.

A female animal's potential to produce excess milk for human consumption is linked to cycles of reproduction. Cows can typically begin producing offspring around two or three years of age, and the calving rate for traditional pastoralists, according to ethnographic observations, is one calf born every 12-18 months (Dahl and Hjort 1976: 36). Excess milk for humans would have been available for a four month period

[38] Below, I focus on the milk-providing potential of goats specifically. Although many caprine bones in the assemblage could not be identified as definitely goat, there were no specimens that could be positively identified as sheep.

following the birth of a calf (ibid: 143). In contrast, female goats can bear offspring as young as a 6 months of age, and kid up to two or three times per year (ibid: 91-92). Goat breeding tends to be less seasonal than cows or water buffalo, as they are less dependant on grazing; in fact, goats are sometimes relied on to provide milk during the dry season, when cows' milk may be scarce (ibid: 93). Further, some ethnographers have observed fluctuations in goat breeding that map onto climatic resources; regions with one rainy season witness kids born during those rains, while areas with two rainy seasons may have two seasonal breeding periods (ibid: 36). Because goats conceive during the rainy season, they begin providing milk at an earlier stage in the dry season. Goat milk is generally considered good for children, as the constituents of this milk are more similar to human milk and therefore most easily digested (ibid: 216).

Although they tend to be rarer in the Kadebakele faunal assemblage, female water buffalo may have been important producers of milk. In modern times, ethnozoologists have highlighted the importance of female water buffaloes in a dairying economy. These animals are currently responsible for half the milk production in India, and their milk contains about twice the butterfat of cow's milk (6.5% versus 3.0%) (Cockrill 1967: 122). Furthermore, the water buffalo is also capable of producing two or three times milk as much as the zebu cow (Hoffpauir 1982: 223-4). As such, the combined efforts of female zebu, water buffalo and goats could have sustained a robust dairying economy during the Iron Age. As mentioned above, however, it is likely that both male and female animals at Kadebakele lived into advanced age. Below, I consider the faunal evidence for (probably male) cattle used for traction labor.

7.5 Paleopathologies: traction and infection

Faunal specimens often reflect the life history of an animal, particularly with regard to repeated physical stress, trauma or infection, which leave certain signatures on bones. However, as most assemblages are disarticulated remains of animals, and paleopathological lesions are usually identified on solitary fragments of bone it is often difficult to determine whether a lesion has arisen as the result of infection or trauma (Murphy 2004: 9). With that in mind, certain elements are more likely to be bear pathologies in response to particular infections and/or physical hardships.

In the following section, I present evidence for use of cattle as traction animals, where a yoke is used to harness a plow or cart to an animal. As stated above, my determination of the age and sex of animals in the Kadebakele assemblage revealed that animals of both sexes lived into and past adulthood; this animal management pattern suggests that domestic stock may have been kept for secondary products purposes, such as for labor. Second, I will discuss two pathological specimens in the Kadebakele faunal assemblage that bear traces resembling tuberculotic infection.

Traction

Body movement is accomplished by tendons concentrating the force of a muscle upon a small surface of a given bone. Repeated, abnormal strain on the body provokes a process of bone deposition, or osteogensis (Johannsen 2004: 40; Higham et al. 1981: 354). This remodeling may result from stress-induced activity as well as infection, and its extent will vary depending on an individual's sex, age and weight (Higham et al. 1981: 360). Osteogeneis can be described either as "lipping", a functional extension of the

articular surface by excess bone formation, or as "exostoses", the formation of abnormal osseous tissue on the outside of bone (Johannsen 2004: 41; Bartosiewicz et al. 1997: 33). The load of a cart or plow's weight is borne primarily by the lower limbs, whose tendons are anchored in the foot bones (Johannsen 2004: 45). Of those elements, the third phalanx supplies terminal anchoring for the most tendons (Higham et al. 1981: 354).

As such, the bones of the feet (metapodials and phalanges) are where pathologies occur most often (Johannsen 2004: 40). While skeletal adaptations on limb bones are considered one of the best lines of evidence for draught labor, improper foot conformation can also produce such skeletal signatures (de Cupere et al. 2000: 256). Furthermore, studies of wild cattle demonstrate that old age can also cause the formation of distal exostoses in the proximal phalanx; as such, it may sometimes be difficult to attribute this pathology to a specific factor (Johannsen 2004: 42).

Although female animals can be used as draught animals, ethnographic research indicates that males are more often used for these purposes because the labor may have a negative effect on milk production (Lawrence and Pearson 2002: 105). If dairying was an important component of subsistence, as I suggest above, then it is likely that primarily male cattle were used for draught purposes. In addition, the likely presence of castrates at Kadebakele (see above) supports the notion that male zebu could have been kept for labor during the Iron Age. Furthermore, Bartosiewiscz et al. (1997: 101) argue that animals selected for traction labor versus meat production possess antagonistic traits. While long-legged, large animals are preferred for traction labor, animals selected for meat are likely to be shorter, with decreased percentages of bone and fat within carcass weight. These

latter animals would likely not perform well as draught cattle, although the phenotype created by castrating zebu cattle most likely would.

Water buffalo can also be useful with regard to traction activities. Although water buffalo are often difficult to herd, they are easy to lead and are well-adapted to move in water or mud as a result of exceptionally flexible foot joins and splayed hoofs (Cockrill 1967: 121; Hoffpauir 1982: 220). They are remarkably long-lived, and can often work at 20 years old, and may live to 40. Ethnographers observe that these animals are most often associated with use for wet rice cultivation; before seeds can be transplanted, the flooded fields must be prepared by plowing, harrowing, and puddling (Hoffpauir 1982: 222). While zebu cattle are more versatile in terms of labor capacity (with higher heat tolerance and lower water requirements), buffalo are better suited to paddy work (ibid.). In prehistoric Thailand, Higham and Kinjam (1979) have put forth an interesting correlation between the advent of rice paddy agriculture and appearance of water buffalo. The authors observe that water buffalo were only present at the site of Ban Chiang from 1600 B.C. onwards, coincident with the advent of rice paddy cultivation there (Higham et al. 1981: 364-5).

With regard to South India, however, this relationship is not as direct, as the appearance of water buffalo in the faunal record precedes the beginnings of large-scale rice cultivation (generally attributed to the Iron Age); Nath (1968) reports 22 water buffalo specimens from Neolithic deposits at Brahmagiri. However, as stated in Chapter 6, the problem of differentiating zebu, water buffalo and gaur is still far from being solved; Korisettar et al. (2001) argue that this may have obfuscated previous studies of

South Indian Neolithic fauna such that the presence of water buffalo is understated. At Kadebakele, water buffalo remains are much less common than zebu (n=18 and 155, respectively); however, there are a large number of specimens that could be not identified as either species (n=395), so the relative frequency represented by these remains is open to revision. Iron Age deposits at Brahmagiri (Karnataka) and Nevasa (Maharashtra) have also yielded water buffalo remains, in similarly infrequent proportions. Although there is no clear evidence linking water buffalo in South India to the cultivation of rice during the Iron Age, it may be useful to keep the biological perspective on this animal's physiology in mind to suggest that these animals would have been useful in that regard.

The most direct evidence for traction animals at Kadebakele are five faunal specimens bearing osteological signatures resembling those produced by the repeated strain of traction labor. One cattle (*Bos* or *Bubalus*) third phalanx was recovered with lipping present on the dorsal edge of the bone (figure 7.4). Two cattle (*Bos* or *Bubalus*) and one large mammal first phalanges were identified with heavy muscle markings along the proximal shaft (where muscles and tendons were anchored). These elements may also be indicative of draught activities. One large acetabulum with lipping around its margins was also recovered, although it was too fragmented to conclusively attributed to cattle.

Pathological Lesions: Tuberculosis?

Research into the health of past animal populations has recently begun to focus on aspects of disease and infection discernable through osteological signatures on archaeological materials. Although modern ethnozoological research can provide important insight regarding the transmission, treatment and impact of disease in modern

times, it is often difficult to extrapolate such models into the past, particularly because of the impact of modern technology on animal health and reproduction (i.e., feedlot conditions, growth hormones) (Cosivi et al. 1998). However, the biology of certain pathogens and their effects on mammal physiology may allow us to speculate regarding possible causes of pathological lesions observed on archaeological faunal specimens. Below, I will consider the possible effect of *Mycobacterium bovis,* which causes zoonotic tuberculosis in both animal and human populations.

Following infection, tuberculotic organisms circulate in an organism's bloodstream, particularly in areas containing hemopoietic marrow. In adult animals, vertebrae, ribs and the sternum contain this type of marrow, so these skeletal elements are most likely to bear evidence of infection (Ortner 2003: 229). As the morphology of tuberculous lesions in dry bone specimens resembles other categories of bone infection, it is difficult to make this diagnosis based on skeletal remains. However, it is worth noting that vertebral tuberculosis is the most common and characteristic skeletal lesion in human cases, with the vertebral body almost exclusively involved (ibid: 231).

Lesions observed on a vertebra and astragalus from Kadebakele tentatively identified as that of a large mammal and a *Bos indicus*, respectively, indicate tuberculotic infection. The large mammal verterbral centrum was identified with abnormal exostotic lesions (see figure 7.5) that can be seen extending over the cranial end of the vertebrae, on the dorsal side of the bone. The bone is too fragmented to secure a species identification, or to know precisely which element it represents; most likely it is a thoracic or lumbar vertebral centrum. The asymmetrical nature of the growth indicates

that the bony lesion does not appear to be related to friction between the centra or zygopophyses, and therefore is unlikely to be related to age-related osteoarthritis. Instead, it may be the result of osteomyelitis (infection) or tuberculosis (*Mycobacterium bovis*), which is known to infect cattle (and other mammals) under poor and crowded living conditions (i.e., watering holes and corrals) (Cosivi et al. 1998). In addition, one *Bos indicus* astragalus from Kadebakele bore bony spurs on its medial and lateral margins. Such osteomyelitis is not known to be associated with traction-related skeletal stress or arthritis, but has been documented as an element associated with tuberculotic infection in human pre-adolescents (Ortner 2003: 241). The archaeological specimen in questions was well-ossified to begin with, which unfortunately does not shed much light on the animal's age at death, as the astragalus is ossified early in the maturation process (Amorosi 1989).

7.6 Chapter Summary

Measures of diversity indicate that a diverse base of animals were both hunted and herded at Kadebakele. Hunting was oriented towards locally-available wild resources, particularly birds, fish and turtles; larger game (cervids and wild bovids, for example) are present, but less common in the assemblage. Procurement of these small, wild taxa may serve as evidence for household consumption, rather than communal sharing of larger animals. Ethnographic research has described these small fauna as animals that can be procured by virtually any member of society (i.e., Laderman 1991); that is to say, restricted participation based on gender and age are not often associated

with hunting of small, wild animals as they are with larger game (Marks 1979; Rappaport 1967).

The Kadebakele assemblage also provides ample evidence for the stock-breeding of domestic herds of zebu, water buffalo and caprines (and perhaps pig). Among these domesticates, cow and buffalo comprise the majority of the sample. Metrical attempts to determine the sex of goats in the faunal assemblage were limited due to small sample sizes; however, measured zebu phalanx dimensions could be analyzed. A distribution histogram did not produce clear bimodal patterns characteristic of sexual dimorphism. These data suggested the presence of a population of zebu cows, but suggest overall that neither males nor female animals dominate the assemblage. It is possible, in addition, that intermediately sized zebu castrates were present at Kadebakele. These castrates would have been useful for traction labor (a proposition also supported by osteological signatures on a few specimens in the assemblage); however, water buffalo are also known to be particularly useful for rice paddy cultivation.

Tooth wear and fusion data indicate that some cattle and caprines died as infants/neonates; caprines appear to have been more frequently killed as young animals than cattle were. However, more commonly, domesticates survived into adulthood and often into advanced age. Such an age profile is consistent with a secondary products economy; dairy production, in particular, would have been an ample resource throughout the year by cycling milk production through herds of goats, zebu and water buffalo. The slaughter of adult animals at Kadebakele does not conform to models of maximizing meat production, but may instead bespeak punctuated use of such animal resources.

Many scholars have associated the consumption of such animals with communal feasting events, which tend to highlight social distinctions while promoting group cohesion (see Mills [ed.] 2004; Dietler and Hayden [eds.] 2001; Jackson and Scott 1995). Burgeoning social differentiation documented during the Iron Age may have been tied into such communal events.

In sum, the Kadebakele material indicates that both hunting and local stock-breeding practices were important components of social life during the Iron Age in the Southern Deccan. The procurement of wild game may have served household (or small-scale) subsistence needs, while the less common slaughtering of an adult goat or cow marked communal (larger-scale) consumption events. The keeping and management of herds would have provided resources such as labor and dairy, though the care of these animals would have been a central component of quotidian life. Use of corrals or crowded conditions at watering holes (such as the reservoir on the site's upper terrace) may have provided the conditions favoring the spread of zoonotic tuberculosis between cattle (and perhaps to humans).

Because herding and hunting necessitate different sets of tasks and organization of labor, the confluence of such strategies suggests that numerous axes of distinction were overlain and differentially highlighted. The following chapter will continue to explore patterning of faunal remains at Kadebakele, but will shift focus from the site as a whole to considering excavated units and levels as units of analysis. By examining variation in patterns of animal use over space and within specific contexts, I explore the

relationships between production and consumption practices and dimensions of social differentiation at Kadebakele.

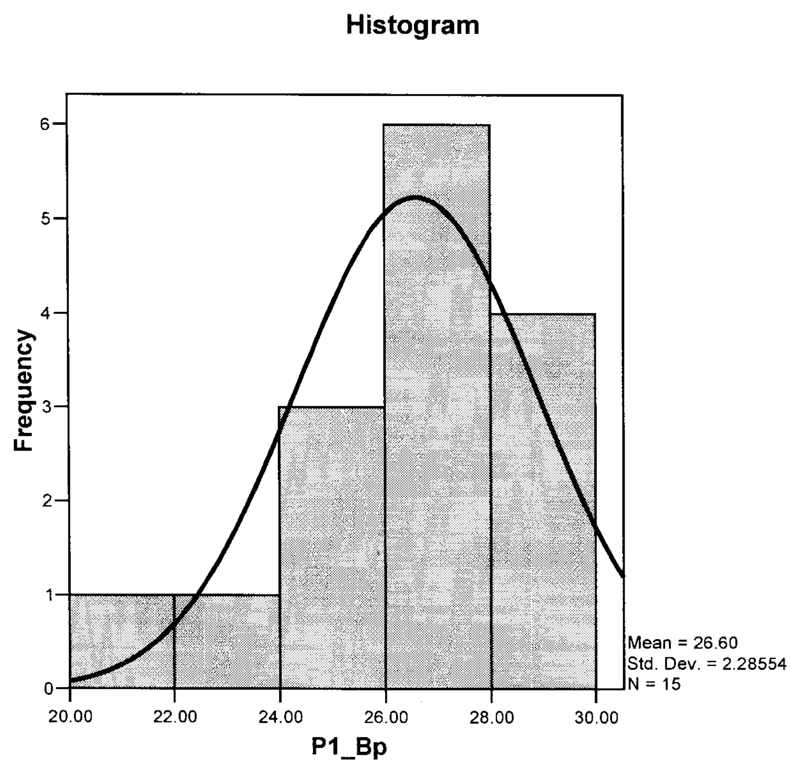


Figure 7.1 – Distribution of *Bos indicus* first phalanx proximal breadth.

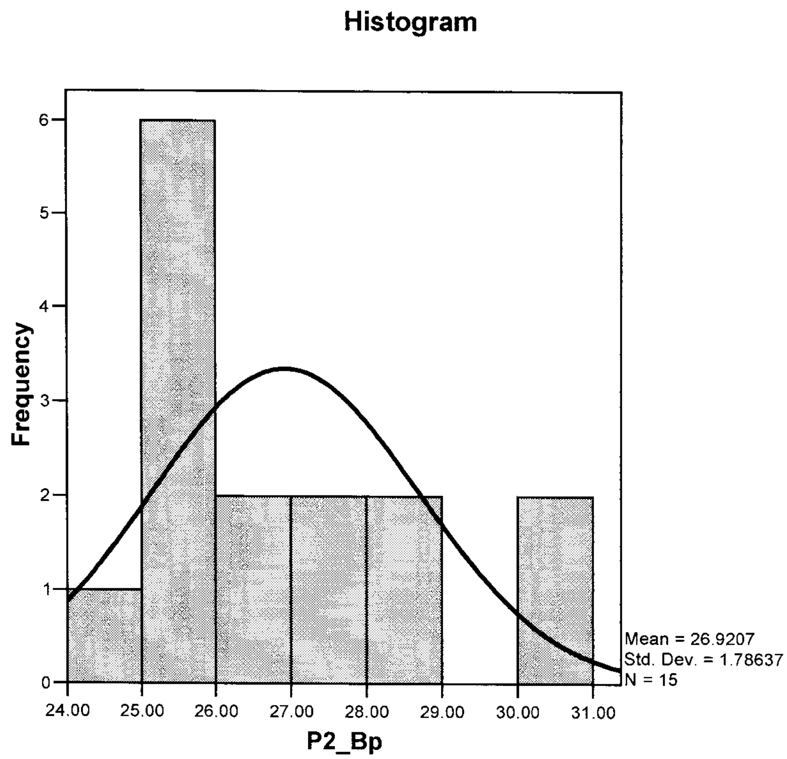


Figure 7.2 – Distribution of *Bos indicus* second phalanx proximal breadth.

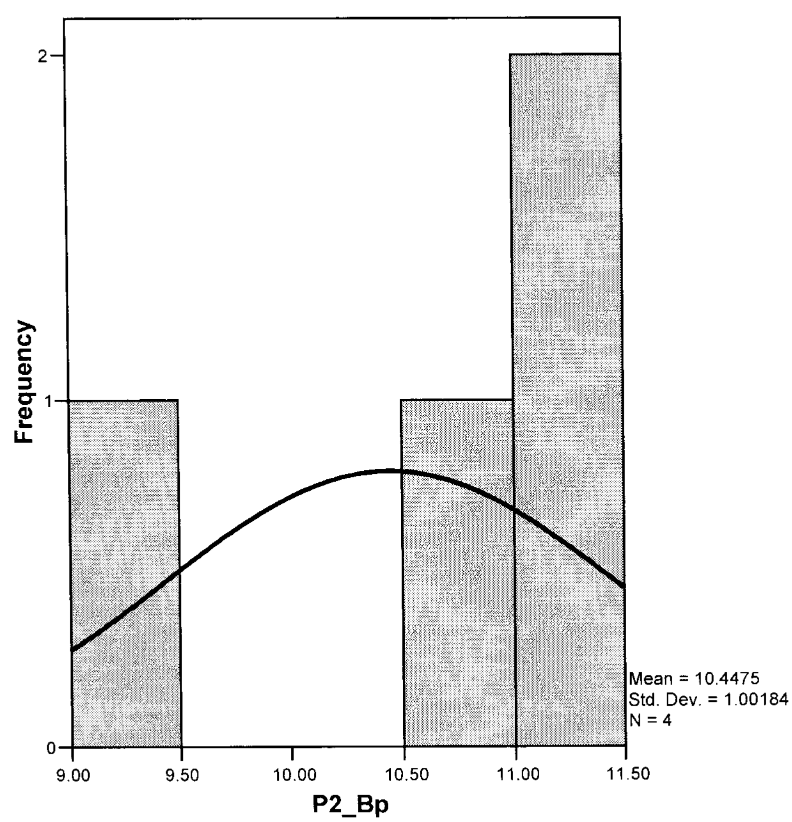


Figure 7.3 – Distribution of *Capra* sp. second phalanx proximal breadth.

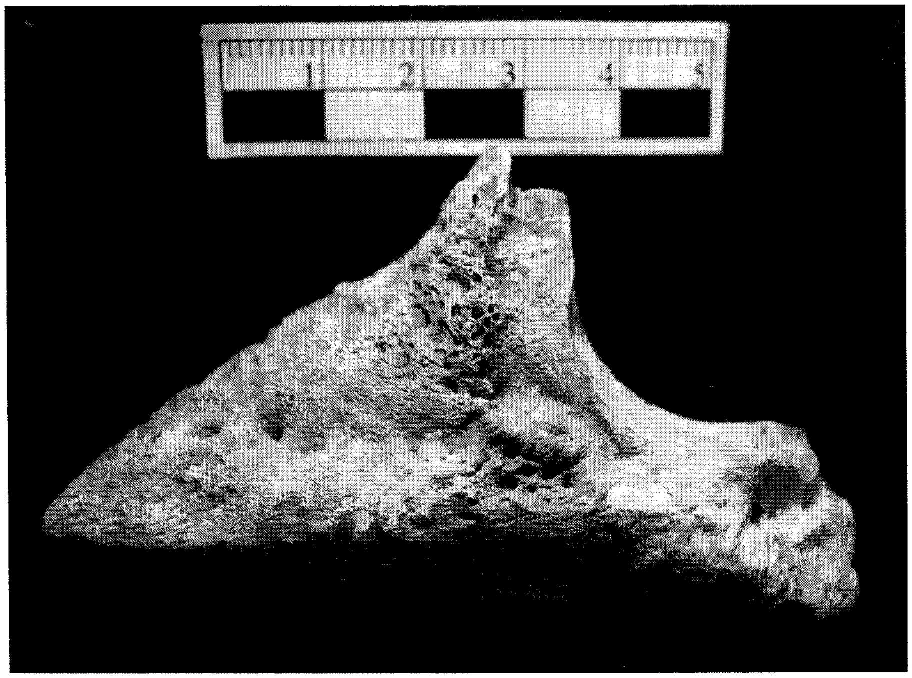


Figure 7.4 – Cattle third phalanx with evidence for traction-related pathology.

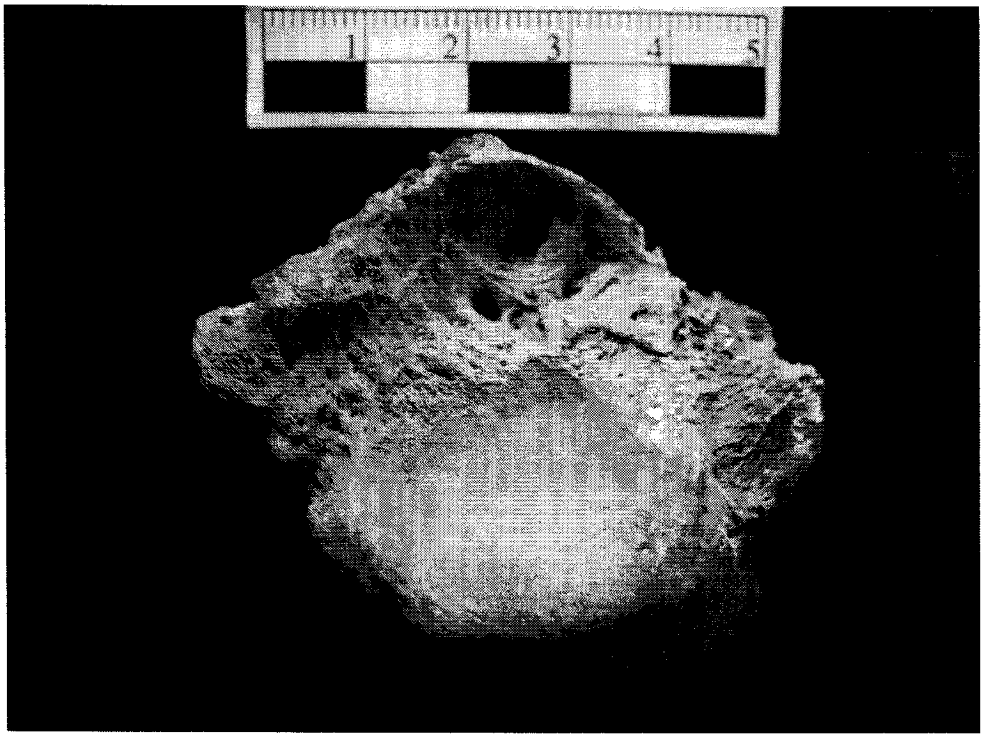


Figure 7.5 – Possibly tuberculotic large mammal vertebra.

Chapter 8: Results II – Animal Use at Kadebakele

8.1 Introduction

This chapter will present data on patterns of animal use within the site of Kadebakele; specifically, I discuss evidence for socio-culturally mediated practices of carcass procurement, preparation, and consumption during the Iron Age. As there is no established framework for understanding the cultural influences that may affect how an animal was utilized during the South Indian Iron Age, my analysis uses faunal remains from Kadebakele in an attempt to formulate such an understanding. One avenue of investigation is the distribution of species and body parts throughout the site and between various contexts. I also investigate evidence for processing and preparation of animal carcasses through analyses of the distributions of burned bone and butchery marks on faunal specimens.

The confluence of these data generate a complex picture of Iron Age hunting and herding, whereby animals were differentially distributed, dismembered, disposed of, and consumed. Specifically, the placement of butchering marks on skeletal elements may suggest whether slaughter and dismemberment processes were standardized, while the distribution of body parts provides an assessment of the manner in which animal carcasses were incorporated into certain deposits. Such lines of evidence speak to differentiation in the use of particular areas of the site, as well as shed light on the social practices that result in deposition. Furthermore, I suggest that the remains of large-bodied, domestic cattle in ritual contexts evidences large-scale, communal consumption,

while domestic trash deposits tend to demonstrate a more even species distribution, including a greater proportion of non-mammalian taxa such as birds and fish.

These lines of reasoning articulate with numerous aspects of social distinctions, as the ownership of cattle may denote status and wealth, while the slaughter and consumption of these animals may serve as a means of organizing labor for megalith construction as well as an opportunity to express social unity. The procurement of animals for household-level consumption appears to target smaller, wild fauna; the hunting of these animals may have been less age- or gender-restricted than the slaughter or preparation of cattle remains. Furthermore, wild fauna would have constituted an important component of subsistence if domestic animals were reared until advanced age for secondary products rather than culled for meat production (as discussed in Chapter 7).

8.2 Distribution of Species

The distribution of animals throughout the deposits at a site can serve as evidence for various avenues of social differentiation. For example, Jackson and Scott (2003) argue that animals consumed by elite members of Moundville society in the prehistoric Southeastern United States could be identified within specific refuse deposits, which were distinctive from deposits associated with large-scale ritual feasting. Rare species within ritual deposits at Moundville have also been interpreted as evidence for communal feasting events (Pauketat et al. 2002). Moreover, in socio-cultural contexts where wild game use is generally low (i.e., 'urban' settlements), the consumption of wild animals could be an important marker of social status (Grant 2002; Reitz 1987). When both

hunting and herding contribute heavily to subsistence regimes, domesticates may connote private wealth and status to the owner, while wild animals may be considered a less valuable resource held in common with other members of society (Russell 1999:159; Bogucki 1993). Sharing of food can also be responsible for the distribution of animals and animal parts throughout a site; while large animals tend to be shared more widely, smaller animals may be shared within a household (Kent 1993; Marshall 1993).

Areas of the Upper Terrace

As discussed in Chapter 6, the Kadebakele upper terrace was differentially occupied and utilized during the Iron Age[39]. Block B and Eastern Upper Terrace units appear to represent domestic habitation areas, with domestic refuse disposal accumulating in the nearby North Midden. Block A contains primarily megalithic stone alignments associated with ritualized or commemorative practices, and may post-date the Iron Age occupation of the upper terrace. Excavations in the Southern Slope unit revealed a sequence of megalith construction layers containing ashy fill and a high faunal density, overlain by midden deposits. Therefore, considering the distribution of animal taxa between these units will provide further evidence for how these spaces were different from or similar to one another, as well as suggest associations between particular social practices and use of specific animals. Table 8.1 below presents both the raw NISP counts and constituent percentage of various taxonomic categories by area (Figure 8.1).

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[39] The results from the Middle Terrace are not included here because very small sample sizes rendered these data incomparable to the upper terrace units.

Taxonomic category	Block A	Block B	North Midden	E. Upper Terrace	Southern Slope
Wild Mammals	1 (<1%)	21 (3%)	34 (6%)	4 (3%)	26 (4%)
Domestic Mammals	10 (6%)	28 (4%)	90 (15%)	8 (6%)	13 (2%)
Cattle	26 (16%)	122 (20%)	91 (15%)	45 (33%)	280 (39%)
Birds	95 (59%)	126 (20%)	179 (30%)	26 (19%)	149 (21%)
Turtles	13 (8%)	91 (15%)	56 (10%)	3 (2%)	69 (10%)
Snakes/Lizards/Frogs	7 (4%)	31 (5%)	33 (6%)	3 (2%)	23 (3%)
Fish	7 (4%)	20 (3%)	70 (12%)	21 (16%)	142 (20%)
Commensal Mammals	2 (2%)	178 (29%)	35 (6%)	25 (19%)	7 (<1%)

Table 8.1 Frequency of various taxonomic categories by area. Both NISP and percentage of total identifiable specimens in that area are given for each category.

These relative frequencies bespeak a few resemblances and differences between excavated areas. In general, snakes, lizards, frogs and wild mammals[40] were relatively rare in all units. In addition, wild mammal remains in the North Midden units suggest discrete consumption and discard events; for instance, all of the chital remains (MNI=1) recovered from Kadebakele were found in this midden; with the majority of specimens (n=8 of 12) recovered from Level 6. Similarly, the majority of mongoose remains were concentrated among three levels in the midden unit. Although a few of these specimens (n=3 of 12) bore evidence for exposure to heat, mogooses are semi-fossorial animals, and the skeletal frequency in the North Midden may indicate at least one intrusive (commensal) animal. Fish, birds and turtles were more commonly recovered from the site's deposits, although the remains of these animals were unevenly distributed among

[40] Pigs are excluded from this table because their domestication status is unclear. If they are included as wild mammals in Block B (n=15) this category increases to 6%, if they are added to domesticates, this category constitutes 7% of the total. In the North Midden, pigs (n=12) in wild animals increases to 8%, as domesticates, this category would represent 17%. In the Southern Slope, pigs (n=15) as wild mammals results in 6%, while as domesticates, this category would increase to 4%. Adding pigs to either category in other units does not affect the percentages presented in Table 8.1.

units. While fish remains constituted one-fifth of all specimens from the Southern Slope, these animals were more rare in Blocks A and B. Turtles were relatively common in all units, except for the Eastern Upper Terrace. Bird remains were similarly common, constituting at least one-fifth of the identifiable bones in any unit, but the highest concentration of bird bones came from Block A where they represented nearly two-thirds of all faunal specimens.

Domesticates (including caprines, cattle, and horse), considered together, represent at least one-fifth of the fauna from each unit. However, the relative frequency of medium-sized caprines and large-sized cattle differs between units, as cattle are more frequently represented than caprines. The North Midden unit is an exception to this generalization, where cattles and caprines constitute equal proportions of the total fauna from that area.

Commensal mammals (rats and mice) appear with higher frequency in Block B, North Midden and Eastern Upper Terrace units. Sediments in these areas contained domestic refuse and midden deposits, which tend to be preferred habitats for small, burrowing rodents, which are intrusive to archaeo-deposits. In contrast, megalithic areas of Block A and Southern Slope yielded very few commensal mammal remains. In fact, all of the rat and mouse remains from the Southern Slope (n=7) were recovered from upper levels, within the midden strata.

As discussed in Chapter 5, many faunal specimens cannot be identified more precisely than to body size category. Although such data provides less detail than bones identified to taxonomic group, body-size information is still useful. The distribution of

mammals into three body size categories are presented below in Table 8.2, both as raw NISP counts, as well as constituent percentage of the total mammalian specimens identified to body size in that area.

Taxonomic Category	Block A	Block B	North Midden	E. Upper Terrace	Southern Slope
Large mammal	1808 (23%)	5079 (32%)	3084 (52%)	915 (49%)	8607 (34%)
Medium mammal	6143 (77%)	10476 (66%)	2668 (45%)	929 (49%)	16771 (66%)
Small mammal	45 (<1%)	175 (1%)	200 (3%)	41 (2%)	120 (<1%)

Table 8.2. Frequency of mammals by body size by area. Both NISP and percentage of total specimens identified to body size in that area are given for each category.

These data show that small mammals tend to be rare in all units. In addition, medium-sized mammal remains predominate in Block A, Block B and the Southern Slope units. In contrast, large- and medium-sized mammal remains are more equally represented in the North Midden and Eastern Upper Terrace units. In general, the data presented in Table 8.2 contrast with the values presented in Table 8.1, which reveal that large-bodied cattle are more common than medium-sized domesticates.

This discrepancy may indicate differential processing of medium-sized animals, perhaps through preparation methods which require portions of bones to be reduced substantially. Russell (1999:163), for example argues that the cooking of stews for small-scale consumption can often result in such differential fragmentation. This manner of meat preparation can make effective use of an animal's carcass; for example, meat on irregular elements (such as vertebrae) can be easily prepared in this manner, and the potential for a small amount of meat on a bone can be supplemented by the addition of

water to the stew. As a result, the preparation of stews produces bones that are less likely to be identifiable to species. If medium-sized mammals were preferentially included in these meals, the contribution of such taxa may be understated in Table 8.1, as these elements would not be identifiable to taxonomic category.

Feature versus non-feature contexts

Here, I compare the distribution of animals in feature versus non-feature contexts in order to elucidate the relationships between specific contexts and the animal remains incorporated therein. Features are generally considered to be components of the archaeological record that cannot be removed from the ground intact. In some cases, these artifacts reflect the efforts of deliberate construction or placement; for example, burials, pits and structural remains are features deliberately created by humans in specific spatial contexts. At other times the term “feature” is used to describe deposits identified by the archaeologist as distinctive from the surrounding matrix; for example, stains in sediment that result from decomposing materials not intentionally created by humans per se. Although a feature may be well-maintained during its use-life, its excavated contents may be unrelated to its intended “function” and more indicative of post-use filling with trash remains. We may such describe “unintentional features” as archaeological contexts that evidence past behaviors, but do not directly represent deliberate placement of cultural materials or the cultural modification of sediments.

It is useful to refer to this issue of intentionality in the context this analysis, as only a few of the excavated features from Kadebakele contain materials that directly reflect meaningful placement of artifacts in specific contexts. Features at the site include

stains, pits, structural remains and surfaces. Many of these contain artifacts which do not reflect use of the feature, but result from trash disposal after the area was no longer maintained. Table 8.3 below compares these depositional contexts for Block A, Block B and the Southern Slope excavation areas. The North Midden[41], Eastern Upper Terrace and Middle Terrace units did not contain sufficient faunal specimens from feature deposits to warrant a comparison.

Taxonomic Category	Block A feature	Block A non-feature	Block B feature	Block B non-feature	SS feature	SS non-feature
Wild mammal	1 (22%)	0	2 (3%)	19 (4%)	5 (6%)	23 (4%)
Domestic mammal	2 (4%)	8 (7%)	5 (7%)	23 (5%)	4 (5%)	9 (1%)
Cattle	11 (25%)	15 (13%)	18 (20%)	104 (19%)	41 (52%)	239 (38%)
Birds	22 (49%)	73 (61%)	21 (23%)	105 (19%)	2 (3%)	147 (23%)
Turtles	6 (14%)	7 (6%)	4 (4%)	87 (16%)	5 (6%)	64 (10%)
Snakes/Lizards/Frogs	1 (2%)	7 (6%)	8 (9%)	23 (5%)	0	23 (4%)
Fish	1 (2%)	6 (5%)	3 (3%)	17 (4%)	22 (28%)	120 (19%)
Commensal Mammals	1 (2%)	2 (2%)	28 (31%)	150 (28%)	0	7 (1%)

Table 8.3 Frequency of various taxonomic categories in feature versus non-feature deposits in some areas of the upper terrace. Both raw NISP values and percentage of total identifiable specimens for these areas are provided.

Interestingly, these data demonstrate that faunal contents of feature deposits tend to resemble the surrounding the matrix (also Table 8.1). Therefore, many of the features excavated at Kadebakele do not contain faunal constituents intentionally deposited in

[41] Although the entire North Midden could arguably be considered a "feature", it will be considered as an excavated area of the site which reflects long-term, and habitual, cultural use.

specific spatial contexts. In fact, the structural remains and pits excavated at the site appear to have been filled with trash after the features fell out of use, suggesting that structures and associated pits were well-maintained during their use-life. These simply served as disposal loci after the area was no longer maintained.

A few marked differences between feature and non-feature contexts are observable. First, cattle remains are more commonly found within feature deposits from all three areas. Second, the representation of bird remains in the Southern Slope features contrasts with the higher incidence in the overlying midden. In contrast, bird remains are quite common in all Block A, representing nearly one-half of all specimens from these deposits. These distributions corroborate the notion that the megalithic structures in Block A evidence a different use-history than the Southern Slope megalith; the former may reflect post-Iron Age activities distinctive from those associated with the creation of the Southern Slope megalith (deposits in this area will be discussed in more detail in the following chapter).

In sum, there is no clear patterning with regard to animal taxa incorporated in feature contexts throughout the site in general, and the faunal contents of features themselves do not appear to provide unique information regarding cultural behavior. In fact, the representation of certain taxa does not seem to change substantially between contexts within an area, but varies consistently between areas. Such macro-patterning indicates overall distinctiveness of excavation areas and corresponding differential use of space at Kadebakele. Areas containing domestic refuse and habitation debris (North Midden, Block B, Eastern Upper Terrace) appear to contain a more diverse and even

distribution of animals in addition to a higher percentages of intrusive, commensal rodents. The case of the Southern Slope unit is less clear, primarily because this area has been used in two different ways; over half a meter of midden deposits overlie the megalith and associated strata. Table 8.4 examines these two matrixes separately in order to compare the patterns of animal use within midden and megalithic contexts.

Taxonomic Category	Southern Slope Midden	Southern Slope Megalith
Wild Mammals	5 (3%)	21 (4%)
Caprines	2 (1%)	11 (2%)
Cattle	23 (14%)	257 (47%)
Birds	54 (33%)	95 (17%)
Turtles	18 (11%)	51 (9%)
Snake/Lizard/Frog	16 (10%)	7 (2%)
Fish	38 (23%)	104 (19%)
Commensal Mammals	7 (4%)	0

Table 8.4 Frequency of various taxonomic categories in the midden versus megalithic strata of the Southern Slope units. Raw NISP values as well as percentage of total identifiable specimens for each deposit are provided.

The most definitive trend in Table 8.4 is that cattle remains are much more common within the megalithic deposits than the overlying midden, while the reverse is true for birds (figure 8.2). The distribution of species within the upper midden deposits of the Southern Slope is relatively even, resembling the generalized midden deposits in the North Midden unit. In contrast, megalithic levels in the Southern Slope are strongly dominated by cattle remains, which constitute nearly half of the identifiable faunal specimens within these strata.

8.3 Animal Portions at Kadebakele: Distribution of Body Parts & Butchering

The practices of slaughter, dismemberment and distribution are culturally mediated processes by which an animal's carcass is utilized, and can inform on culturally- or ethnically-sanctioned processes of slaughter, dismemberment or methods of food preparation (Chase in press; Klenck 1995). Here, I will discuss patterns of body part distribution among the site's deposits, considering the effects of both economic and culturally-mediated notions of value on carcass partitioning behavior. Furthermore, I will analyze the distribution of cut marks on faunal elements, and suggest ways in which animals were partitioned into sets of bones that may have been differentially used (i.e., Zeder 1988; Binford 1981, 1978).

Body Part Representation

Many analyses of the distribution of body parts within a site's deposits have tended to focus on the energetics of animal slaughter and procurement of meat from a carcass; that is to say, scholars often accept the assumption that individuals will avoid putting effort into preparing animal parts that provide very little food or useful by-products. For example, the "schlep" effect (Perkins and Daly 1968) was conceptualized for the transport of hunted, large game. This model posted that only the meat-bearing parts of a carcass would be brought away from a kill site to minimize the weight of the meat that must be "schlepped". Various strategies for the utilization or transportation of animal parts are thus inferred from the concomitant variation in skeletal part frequency and the food utility value of individual carcass parts (i.e., Binford 1978). These values model the utility of a body part based on the amount of grease, marrow, muscle and fat

tissue attached to a skeletal portion. Zeder (1991) elaborates on this notion by suggesting that a similar logic is applicable to domestic stock: a herder slaughtering a cow or goat for his/her own procurement would be unlikely to take the animal far from the site of consumption, and the entirety of that animal is likely to be deposited in a single location. In contrast, specialized distribution of animal parts is likely to produce an accumulation of non meat-bearing feet and heads at the place of slaughter/dismemberment, with an accumulation of meaty fore/hindlimb bones at loci of consumption/disposal.

While these models may be applicable to some socio-historical contexts, it is imperative to keep in mind that culturally-mediated concepts of value differ in various historical and/or environmental contexts (i.e., Bartiosiewicz 1997). Unfortunately, we currently lack a clear understanding of cultural influences that may have affected how an animal was dismembered or distributed in the South Indian Iron Age; my analysis attempts to formulate such an understanding. Therefore, I rely on models created to assess the relative economic value of body parts in an attempt to uncover culturally-mediated influences that may result in divergence from so-called 'rational-economic' models of animal use.

In addition, any consideration of the body parts found in an assemblage must take into account the taphonomic effects of density-mediated attrition insofar as low-density portions of bones do not survive in archaeological deposits, or may be differentially targeted by taphonomic agents such as carnivores (Brain 1969). Furthermore, bones of various species have differential survival rates, and will thus be unequally preserved and represented in faunal assemblages (Ioannidou 2003). However, as discussed in Chapter 6,

the taphonomic effects of carnivore-ravaging and density-mediated attrition do not seem to be significant factors biasing the contents of the Kadebakele assemblage. As such, it is likely that patterns of body part distribution across the site can be used to address practices of slaughter, dismemberment, and distribution.

Distribution across Areas

The over- or under-representation of body parts can only be assessed in comparison to the expected proportion of parts that would come from a complete animal. Should all elements of an animal's skeleton be deposited in a single place and each element have the same chance of preservation, the part distribution of recovered bones should match the standard distribution. However, despite the fact that density-mediated and other attritional factors are not strongly biasing the Kadebakele assemblage, this ideal case is rare and unlikely, as certain elements may be fragmented and less easily identifiable. Therefore, part distributions within deposits that approach the standard are assumed to indicate utilization and deposition of an entire animal, while marked variation from the standard pattern can indicate selective distribution and deposition (i.e., Zeder 1991).

The tables below present the percentage of the number of cattle (table 8.5) and caprine (table 8.6) bones among five portions of the carcass (head, axial, forelimb, hindlimb, feet) as distributed across excavation areas at Kadebakele. The skeletal elements included in these categories are listed in Chapter 6, Table 6.1. The expected percentages of parts in each category is also included in these figures for comparative purposes. Small sample sizes in many areas are likely responsible for extreme values for

certain elements; as such, patterns of part distribution that results from NISP values under 25 should not be considered reliable, and are omitted from the discussion below.

Part (in %)	Block A	Block B	Southern Slope	North Midden	E. Upper Terrace	Middle Terrace	standard
Head	22	32	32	22	25	33	34
Axial	0	2	2	3	3	0	35
Forelimb	4	4	3	6	11	33	7
Hindlimb	0	8	5	8	4	0	5
Feet	74	54	58	51	47	33	19
Total NISP	*27*	*123*	*280*	*84*	*45*	*3*	

Table 8.5 Percentage of skeletal parts for cattle by area versus a standard animal.

Part (in %)	Block A	Block B	Southern Slope	North Midden	E. Upper Terrace	Middle Terrace	Standard
Head	89	37	31	24	11	0	34
Axial	0	0	0	11	0	0	35
Forelimb	0	11	23	21	33	0	7
Hindlimb	0	22	8	9	0	0	5
Feet	11	30	38	35	56	0	19
Total NISP	*9*	*27*	*13*	*89*	*9*	*0*	

Table 8.6 Percentage of skeletal parts for caprines by area versus a standard animal.

Standardized calculations of the economic utility of various skeletal portions may prove helpful in evaluating these data[42] (i.e., Binford 1978), which indicate slight differences with regard to the processing between of cattle versus caprines. Rational-economic models of carcass use posit that low value parts such as foot and lower limb bones would be more likely discarded following slaughter, prior to transport/distribution.

[42] My analysis will use %MGUI calculations as a proxy for the value of skeletal elements. MGUI is the modified general utility index, which is a modified value that considers "rider" elements that are themselves of low value, but are often transported while attached to high value elements (Binford 1978). These numbers are expressed as a percentage value between 1 and 100, with increasing element utility corresponding with higher numeric value.

Data from Kadebakele are congruent with this assumption, as cattle feet are 43% more common than expected for a single animal carcass, while caprine feet are only 20% more common. Although this discrepancy could arguably be attributed to preferential destruction of caprine feet by carnivores, or in the process of preparing/transporting hides[43], this patterning may suggest that cattle feet were removed and discarded more often than those of smaller-bodied caprines. High skeletal representation in the North Midden also suggests that the majority of discard from preparation and/or consumption occurs in this area, suggesting that animals were being slaughtered and consumed at the site itself.

In addition, the lack of correlation between the utility of skeletal portions and frequency of these parts (see figures 8.3 and 8.4) suggests that animals were procured and consumed locally (Wattenmaker 1987: 198). The fact that low-value bones are unequally represented does not conform with models for specialized butchery and distribution. A similar pattern is observable with regard to the remains of wild mammals (figure 8.5), furthering the hypothesis that entire animals tended to be consumed at the site.

Moreover, the Kadebakele dataset do not show significant differences in body part representation between wild and domestic mammals (table 8.7 below, figure 8.6).

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[43] The faunal assemblage lacks clear signatures of skinning animals for hides (usually represented by butchering marks encircling the metapodia), some cut marks are present on foot bones (see following section) and could be interpreted as evidence for hide processing.

Part (in %)	Wild	Domestic	Standard
Head	33	29	34
Axial	13	5	35
Limb	54	66	31
Total NISP	*93*	*709*	

Table 8.7 Percentage of skeletal parts for wild versus domestic mammals versus standard animal.

With reference to the schlep effect and Zeder's postulate regarding distribution, both wild and domestic stock appear to have been incorporated into the Kadebakele faunal assemblage under similar conditions. These data support the contention that complete animals were disposed of at the site, and the profound under-representation of axial and cranial elements within body-size classes may be explained by analytical biases.

First, lack of axial elements for all animals can be attributed to the difficulty of reliably identifying these bones to species, or as a result of being subject to intensive processing, perhaps in the context of using these meaty portions for stews, or drying meat on rib bones. In addition, cranial elements appear to be slightly under-represented, perhaps because portions of skulls may prove difficult to identify, particularly as they become more highly fragmented as a result of intensive processing or the effect of attritional forces. Thus, they are more likely to be classified as "unidentifiable". Further, skeletally dense elements such as mandibles and teeth are more resistant to fragmentation and are unlikely to be counted twice, unlike a single broken limb bone that could be represented by many fragments. This fact may also be correlated with the over-representation of feet at Kadebakele, as fragments of these bones are commonly identifiable to element and species, if not at least to body-size.

Although data from specimens identified to body size offer less precise resolution than those from specific taxonomic categories, the distribution of large-, medium- and small-mammals throughout the site can also attest to certain patterns of animal use. Tables 8.8, 8.9 and 8.10 present a comparison of percentages for these size categories[44] from Kadebakele, respectively. Larger sample sizes within these categories allow for more robust patterning that bears many similarities, and some important differences, with the distribution of body parts for the species discussed above.

Part (in %)	Block A	Block B	Southern Slope	North Midden	E. Upper Terrace	Middle Terrace	Standard
Head	6	8	13	14	9	5	34
Axial	24	26	26	39	39	14	35
Limb	70	66	61	47	52	81	31
Total NISP	*1435*	*3752*	*6984*	*2138*	*727*	*153*	

Table 8.8 Percentage of skeletal parts for large mammals by area versus a standard animal.

Part (in %)	Block A	Block B	Southern Slope	North Midden	E. Upper Terrace	Middle Terrace	Standard
Head	4	2	5	10	6	2	34
Axial	30	25	30	40	37	20	35
Limb	66	73	65	50	57	78	31
Total NISP	*4831*	*7983*	*12723*	*1802*	*613*	*309*	

Table 8.9 Percentage of skeletal parts for medium mammals by area versus a standard animal.

[44] In order to better understand the patterns that may be unique to animals of varying body sizes, the cattle and caprine data discussed above have been included in the values for large- and medium-mammals shown in Tables 8.8 and 8.9. Only three categories of elements (head, axial, limb) are used for this analysis because fore/hindlimb and metapodial fragments are likely to be included within the large category of "long bone fragments". Furthermore, it is important to mention that the standard percentage of bones for feet vary between Families of mammals; bovids have four metapodial bones in the lower limb, while other mammals (pigs, dogs, etc.) have sixteen. For simplicity's sake, I have chosen to use the percentages of the standard bovid skeleton in these figures because the majority of identifiable mammals at Kadebakele are bovids, and are thus likely to comprise many of the specimens that could not be identified beyond size class.

Part (in %)	Block A	Block B	Southern Slope	North Midden	E. Upper Terrace	Middle Terrace	Standard
Head	3	6	8	9	12	0	34
Axial	15	22	17	24	17	0	35
Limb	82	72	75	67	71	100	31
Total NISP	*36*	*164*	*111*	*200*	*41*	*3*	

Table 8.10 Percentage of skeletal parts for small mammals by area versus a standard animal.

Many similarities are apparent between the data in these tables and Tables 8.5 and 8.6. First, the North Midden unit closely approximates the expected ratio for both large- and medium-mammal carcasses, suggesting that this area did function as a generalized midden. In addition, limb elements are markedly over-represented in all units, a trend that likely resulted from the large number of cattle and caprine foot bones. Furthermore, the distribution of body parts does not appear distinctive with regard to body size in each excavation area. In addition, larger sample sizes for the Middle Terrace unit demonstrate a distribution of body parts resembling units on the upper terrace[45].

The higher relative frequency of axial portions in large- and medium-sized mammal remains in Tables 8.8 and 8.9 corroborates the suggestion that these bones are difficult to identify to species and therefore under-represented in Tables 8.5 and 8.6. In addition, specimens that could only be identified to body size appear to contain a significantly lower percentage of head bones than observed for cattle and caprines in Tables 8.5 and 8.6. This discrepancy is likely to be related to the fact that teeth are often

[45] This pattern is true for small mammals as well, but should not be considered reliable because the sample size for this class of animals is too low (n=3).

identifiable to taxonomic category, while skull fragments are often only identifiable to body size at best. In sum, the data in Tables 8.8 and 8.9 resemble frequency distributions observed for cattle and caprines body parts, suggesting similarity in the ways in which large- and medium-sized mammals were used, and underscoring variability in animal use between excavation areas.

Distribution in Feature versus Non-feature Contexts

Here, I investigate the distribution of animal parts within features in order to evaluate the nature of these deposits, as well as the relationship between features and the surrounding matrixes in various areas of the site. Features often provide better preservation for faunal materials, as they may be covered after they are filled and the contents protected from various attritional forces. Features may also represent the remains of specific contexts associated with social practices such as storage, interment, dumping, or structure maintenance. The distribution of large and medium-mammal body parts in feature and non-feature deposits within Block A, Block B and the Southern Slope deposits[46] are considered in the tables below (Tables 8.11 and 8.12).

Part (in %)	A feature	A non-feat	B feature	B non-feat	SS feature	SS non-feat	standard
Head	7	5	9	7	11	12	34
Axial	28	23	26	27	37	26	35
Limb	65	72	65	66	52	62	31
Total NISP	*354*	*1055*	*282*	*3355*	*638*	*6066*	

Table 8.11 Percentage of skeletal parts for large mammals versus standard animal by context.

[46] Only two features were identified within the North Midden, and sample sizes in this area are too small to warrant a comparison between the fauna within and outside of these contexts.

Part (in %)	A feature	A non-feat	B feature	B non-feat	SS feature	SS non-feat	standard
Head	3	3	2	2	4	5	34
Axial	29	31	24	24	27	31	35
Limb	68	66	74	74	69	64	31
Total NISP	*1056*	*13767*	*555*	*7408*	*2037*	*10674*	

Table 8.12 Percentage of skeletal parts for medium mammals versus standard animal by context.

Not surprisingly, large- and medium-sized mammal limb bones are over-represented within both types of deposits at Kadebakele, a pattern resembling the pattern of part representation observed at the site overall. No significant difference in part representation is visible between features and levels in Block A and Block B; within the Southern Slope, however, large-mammal remains in feature deposits approach the expected standard ratio more closely (figure 8.7). Non -feature contexts in this area exhibit the general pattern of limb over-representation resembling other deposits at the site.

In sum, observable patterns in body part representation support macro-patterns of differential site use, rather than differences in the use of animals in specific contexts. The sole exception to this statement concerns the use of cattle, which may have often involved the removal of lower limbs and/or feet prior to transport and/or preparation. Although all areas of the site appear to contain an over-representation of limb bones, there is no evidence for specialized distribution or provisioning for Iron Age residents of Kadebakele. In fact, it is likely that entire animals were incorporated into the site and disposed of in the North Midden; further, there does not appear to be a difference in the

processing of wild or domesticated mammals in this regard. In addition, most areas of the site do not demonstrate significant differences with regard to the contents of features versus surrounding sediment. However, Southern Slope megalith contained higher skeletal completeness for large mammals, suggesting that these animals were deposited in a distinctive and possibly ritualized manner. Other lines of evidence are necessary in order to further explore this contention, and will be considered in detail in the following chapter.

Butchering/Cut Marks at Kadebakele

The processes involved in transforming an animal's carcass into consumable resources involve various physical efforts, which are likely to leave distinguishable marks upon the bones. Although there exists some debate as to how best to quantify cut marks (i.e., Binford 1988; Bunn and Kroll 1986), I have chosen to follow Lyman's (1994:304) procedure of tallying each non-adjacent (>1 cm apart), non-overlapping mark as an instance of an applied force. Using the proportional frequency of butchery-marked bones, I will discuss practices of dismemberment with regard to various areas of the site, taxonomic categories, and specific skeletal portions.

Although there have been interesting methods developed for identifying technology associated with animal butchering, via scanning electron microscopy for example (i.e, Greenfield 1999), that type of analysis was unavailable to me at the time of my research. Instead, I presume that both metal and lithic implements were used to dismember and deflesh animal portions given the fact that such materials were recovered from excavations at the site. Implements of iron, bronze and copper were recovered from

Kadebakele, including three iron projectile points. In addition, over fifty flaked stone tools at the site suggest that both stone and metal implements were used during the Iron Age.

Butchery marks are relatively rare within the Kadebakele assemblage (n=123, or 0.19% of the total assemblage); it is important to note that certain proveniences yielded faunal materials that were encrusted with mineral concretions. This was particularly true for materials from Block B and Middle Terrace units[47]. Therefore, the number of specimens bearing butchering marks in these proveniences is likely to be an under-representation. In addition, the processes and practices involved in transforming an animal's carcass into consumable portions necessarily entails technologies of carcass reduction. The lack of visible cut marks on bone specimens does not necessarily provide evidence for the absence of cutting or dismemberment behavior; it is more likely that absence of cut marks is also related to the methods by which meat portions were prepared. Use of meat and bones in stews (or cooking that occurs within vessels) is likely to require the fragmentation of bones to the point that they are less identifiable to species (or even body size) and obscures the cut marks that were once present. Remains from cooking meaty portions directly over a fire ("roasting") may be more likely to produce larger bone fragments that preserve the marks of dismemberment.

The tables below (8.13 and 8.14) present the relative proportion of butchered specimens identified throughout the upper terrace[48] as well as by taxonomic category.

[47] Proveniences in Block B bearing mineralized specimens: Features 13, 12; Levels 6, 7, 8, 9, 10, 11, 12. Proveniences in the Middle Terrace bearing mineralized specimens: Levels 1, 3, 4 and 6.
[48] No bones with cut marks were recovered from the Middle Terrace unit.

Area	NISP value	% of butchered	% total NISP
Block A	29	24	0.33
Block B	38	31	0.22
North Midden	19	15	0.28
Eastern Upper Terrace	6	5	0.28
Southern Slope	31	25	0.11

Table 8.13 Frequency of butchered bones by area.

Taxonomic Category	NISP Value	% of butchered	% of total NISP
Bird	3	2	0.52
Cattle	11	9	1.90
Caprine	2	1	1.35
Porcupine	1	1	25.00
L artiodactyls	1	1	1.02
L/M bovid	3	2	60.00
Large mammal	73	60	0.37
Medium mammal	27	23	0.07
L/M mammal	2	1	0.21

Table 8.14 Frequency of butchered bones among taxonomic categories.

The data in Tables 8.13 and 8.14 indicate a non-uniform distribution of butchered specimens, both in terms of excavation areas and taxa. While at least one cut-marked specimen is present in all units of the upper terrace, butchered bones were most frequently recovered from Block A, North Midden and Eastern Upper Terrace deposits. Furthermore, a wide variety of animals appear to have bear evidence of butchering, including birds, medium-sized (including porcupine, caprines) and large mammals (including cattle). There is little difference in the constituency of butchered taxa between midden and megalithic contexts (Table 8.15), with the sole perceivable difference that

butchered bird bones were only recovered from midden deposits. However, the Southern Slope megalithic strata contained five times more butchered elements than midden deposits (megalithic levels, n=26 versus midden, n=5).

Taxonomic Category (in %)	Midden	Megalith
Large mammals	69	73
Large/Medium mammals	3	0
Medium mammals	24	27
Birds	4	0

Table 8.15 Percentage of butchered bones in each taxonomic category in midden versus megalithic contexts in the Southern Slope unit.

The placement of cut-marks on bones also indicates slightly different patterns of dismemberment for large versus medium-sized mammals. Among large mammals, cut marks appear on a wide variety of bones, suggesting a non-standardized approach to slaughtering and dismemberment (i.e., Zeder 1991) (Table 8.16[49], figure 8.8). Butchery marks on medium-sized animals occur less frequently and in less places on the skeleton (figure 8.9). Raw NISP counts demonstrate that the majority of cut marks appear on axial, head/neck, and ankle bones; the high incidence of cutting on the ankle and head/neck joints may indicate that non-meat bearing portions were removed prior to distribution or preparation of the carcass. In addition, the butchering of axial elements may be a result of removing ribs and organs for preparation, or through the reduction of these cumbersome portions for use in stews.

[49] Long bone (n=22), carpal/tarsal (n=1) and indeterminate (n=6) fragments bearing cut marks are not included here because they are unable to provide precise information about carcass dismemberment.

However, by calculating the percentage of skeletal portions that bear butchering marks for these two size classes, there appears to be a few differences with regard to processing of these carcasses. Separation of the hip joint tends to occur quite frequently for large mammal carcasses (over 18% of all bones involved in the unpacking of this region bear cut marks), but was not observed at all within the remains of medium mammal; instead, medium-sized mammal tended to bear marks on the ankle joint (over 8% of all ankle bones were butchered). There does not appear to be a significant difference in the tendency for elbow and shoulder joints to be butchered for large and medium mammals.

Joint (NISP)	Large Mammal	% of LM portion butchered		Medium Mammal	% of MM portion butchered
Head/Neck	8	0.60%		4	0.40%
Shoulder	5	4.95%		2	4.76%
Axial	32	0.79%		12	0.14%
Elbow	3	5.26%		2	7.41%
Wrist	0	0		0	0
Hip	8	18.18%		0	0
Knee	1	4.17%		0	0
Ankle	7	2.59%		3	8.57%
Foot	5	1.17%		0	0

Figure 8.16 Number of cut marks on joints, and percentage of skeletal portions that bear cut marks, for large- and medium-sized mammals.

The distribution of butchered elements between features and levels also reveals some insights into site use and maintenance. Data included in Table 8.17[50] illustrates that

[50] The Eastern Upper Terrace unit is excluded from this table because no feature data is currently available for comparison.

features in Blocks A and B contained a higher proportion of butchered remains, while non-feature contexts in the Southern Slope contained the majority of butchered remains. In Block B, a strong similarity in body part representation was revealed between features and levels (as discussed above), suggesting the importance of structure maintenance in domestic spaces. As such, the remains of animals dismembered and processed via butchering were unlikely to become deposited in Block B features while the area was intensively occupied[51]. The subsequent deposition of discarded butchered bones in such spaces may have taken place only after that area was no longer maintained.

Area (NISP)	**Feature**	**% of Feat**		**Non-feature**	**% of Non-feat**
Block A	16	0.80		13	0.19
Block B	12	0.76		26	0.16
Southern Slope	2	0.04		29	0.12

Table 8.17 Frequency of butchered elements in features versus non-feature contexts.

The contrast between the two megalithic areas indicates that Block A features more often contained the butchered remains of food, while the remains in Southern Slope features do not frequently bear marks of dismemberment prior to deposition. All Southern Slope features were incorporated as part of the megalithic structure found in the lower levels of the units. The low incidence of butchered faunal materials from these features, coupled with evidence presented above for more complete body part

[51] Also recall that some of the features in Block B were 'unintentional' features, identified in the process of excavating rather than cultural artifacts created during the Iron Age. The fauna from these loci are similar to the surrounding matrix because these distinctive sediments were not differentially used by Iron Age inhabitants of Block B.

representation, large fragment size and predominance of cattle within these proveniences, provide compelling lines for animal use and megalith construction. The consumption and deposition of cattle remains are central to the formation of these deposits; however, the remains from butchering and portioning of large mammals appears to be incorporated into intervening ashy fill deposits between, rather than inside, the features. Within the pits, cattle remains are present as large, partially articulated elements, which may have been interred with soft tissue still covering them. The consumption of these animals is likely to be associated with large-scale communal consumption events, with the remains of these feasts reflected in the faunal constituents of the megalithic contents (these levels and features will be discussed in greater in detail in the following chapter).

In contrast to the Southern Slope, Block A megalithic features contained slightly more cut-marked elements than the surrounding archaeo-matrix. Butchered specimens appear to have been widely distribution within the features in these areas, including both small and large stone circles and ashy deposits. The fill layers surrounding the features also yielded a similar number of bones with cut marks, albeit less frequently. As discussed above, Block A fauna tended to be dominated by bird remains, but in a pattern similar to the rest of the site, most of the butchered fauna from this area consisted of large mammal elements. The megalithic structures in this area should thus be considered quite distinctive from the Southern Slope megaliths, perhaps post-dating the Iron Age (see Chapter 5, "Unit Summaries"). Unfortunately, given the current state of research in this area, no clear interpretation of butchered elements in Block A can be presented at this time.

8.4 Preparation and Discard of Animal Products: Burned Bone

This section will consider patterns of burned bone within the Kadebakele faunal assemblage, operating under the assumption that the preparation of animal parts is likely to leave signatures on bone evidencing the processes by which a carcass was transformed into consumable and socially acceptable food products. Specifically, cooking of meat may leave traces of heat exposure on bone, although burning can occur both prior to and after deposition of bone, and may not always be a signature of cooking activities.

The potential for analyzing burned bone is somewhat contentious among zooarchaeological analysts. Zeder (1991), for example, suggests that the presence and degree of burning within an assemblage provides little information on practices of cooking and meat preparation. She emphasizes that burning which results from cooking is difficult to distinguish from burning inflicted on specimens once meat was removed (also Lyman 1994:39). Furthermore, a burned bone is likely to fragment more readily than an unburned one (Stiner et al. 1995); therefore, NISP comparisons between these two categories of specimens must be considered carefully[52] (Alhaique 1997). Alternatively, Russell (1999:162) finds patterns of burning a useful avenue for understanding methods and practices involved in meat preparation, specifically methods of cooking by stewing versus roasting (also Jackson and Scott 2003; Gifford-Gonzales 1989). While experimental archaeological research has illuminated many problems

[52] Recall that Table 6.7 suggests average fragment size tended to increase with depth within the archaeo-deposits at Kadebakele; in addition, uppermost levels tended to contain the highest numbers of burned bones (levels 0-3 in all units, with average fragment size less than 0.50 grams/specimen). Levels 19, 21 in the Southern Slope megalith also contained a large number of burned specimens. Given the interconnectedness between burning, fragmentation and identifiability, proveniences with a high percentage of burned bones were more likely to contain fragments that could at best be identified to body size.

inherent in the analysis of burned bone, other researchers have been able to use such data in concert with other lines of evidence to shed light on cultural practices related to food production and consumption. It is with such considerations in mind that I examine patterns of burning within the Kadebakele faunal assemblage. Here, I consider the distribution of burned bone between particular areas and deposits of the site, as well as signatures of heat exposure that may evidence specific techniques of meat preparation.

The burning of bone results from proximity to a heat source, and the degree to which specimen is burned varies with temperatures and duration of heat exposure. As the collagen in a bone is burned, the specimen turns black; with continued heating, the carbon is oxidized and becomes white and chalky (or "calcined"). Although the relationship between a bone's color and the degree to which it was heated is not direct (Nicholson 1993), a bone specimen's color may serve as a general proxy of the range of temperatures to which it was heated (Shipman et al. 1984). In the analysis of the Kadebakele fauna, I have noted two categories of heat exposure (following David 1990): carbonized black (550 – 650° Celsius) and grey/calcined white (above 650° Celsius). In addition, I have taken note of bones with evidence of only partial burning, indicating that the specimen was exposed to heat while still bearing soft tissue (Gifford-Gonzales 1989:193; Buikstra and Swegle 1989:252).

Skeletal elements can be burned in a variety of ways: in the preparation of the meat adhering to the bone, intentionally or unintentionally heated in hearths, or burned within the surrounding matrix (in brush fires, for example) (James 1989). Calcined or carbonized specimens can be produced by heating either "green" (recently defleshed) or

dry bones, and do not definitively index a certain manner of preparation. Partially charred specimens, however, can be readily interpreted as evidence of exposure to heat while partially fleshed, and may serve as evidence of roasting meat. As the process of roasting results in the loss of drippings, this method of preparation could further be interpreted as a sign of conspicuous waste that may involve cooking of meatiest cuts of the carcass (Jackson and Scott 2003: 555).

Table 8.18 presents the raw NISP counts of burned bone within each excavation area, as well as the relative proportion of burned specimens within each unit. In this table, the overlying midden strata in the Southern Slope are considered separately from the megalithic deposits in order to investigate patterns of burning that may be correlated with different manners of accumulation in this area. These data show a non-uniform distribution of burned bone throughout Kadebakele, with the greatest proportion of burned specimens came from the Eastern Upper Terrace Unit.

Area	**NISP burned**	**Total NISP**	**% burned**
Block A	1880	8893	21
Block B	5743	17315	33
Middle Terrace	78	656	12
North Midden	990	6909	14
Eastern Upper Terr	788	2151	37
Southern Slope (all)	4866	28524	17
S. Slope midden	697	5863	12
S. Slope megalith	4169	22661	18

Table 8.18 Distribution of burned specimens throughout the site by NISP and relative proportion of burned bones per unit.

In general, the data above demonstrate that midden fauna tend to be unburned, while areas comprised of structural and post-abandonment debris (i.e., Block B and Eastern Upper Terrace) contain a higher proportion of burned specimens. These latter areas have a distinctive depositional history where burning is likely to have occurred as a result of post-abandonment practices rather than activities directly related to food preparation. For example, bones in Block B and the Eastern Upper Terrace may have been burned following occupation as covering structures were dismantled and burned, or brush fires were set in order to clear fields (e.g., Stahl and Zeidler 1990). To further investigate such patterning, it will be useful to discuss different types of burning within the faunal assemblage.

By considering three types of exposure to heat, various patterns of burning are evident between areas of Kadebakele. Figure 8.10 illustrates the relative proportion carbonized, calcined and partially charred bones within each excavation area (also Table 8.19, below). These data suggest that Block B deposits are somewhat distinctive, containing a significantly higher amount of calcined specimens than any other areas. Given the depositional history of the Block B deposits, these bone specimens were likely associated with various stable ground surfaces, and calcined as a result of prolonged heating from the sun and drying effects of subaerial weathering. The Southern Slope deposits are also unique, containing the highest proportion of charred and partially charred bones, that latter of which tend to be rare in other areas. Of the burned bones within the megalithic strata in the Southern Slope, 28% (n=1175) are partially charred, while within the midden deposits 21% (n=146) are burned in this manner. The higher

proportion of partially charred bones in the megalith associates these deposits with practices of roasting portions of meat on the bone, perhaps for the purposes of feeding large groups of individuals (Russell 1999:162). Although the constituents of the Southern Slope midden resembles the North Midden in many ways (in terms of species spectrum, for example), the higher representation of partially charred elements suggests a continued distinctive use for this area, even following the burial of the megalithic feature.

Area (in %)	**carbonized**	**part charred**	**grey/calcined**
Block A	2.12	0.23	0.55
Block B	3.76	0.47	4.68
Middle Terrace	0.08	0.003	0.03
North Midden	1.35	0.03	0.17
E. Upper Terrace	1.06	0.02	0.15
Southern Slope	5.07	2.11	0.51

Table 8.19 Distribution of varieties of burned bone by area. Percentage of all NISP (n=64,448) at Kadebakele is shown.

Burning was also unevenly distributed among various taxonomic categories. Table 8.20 and Figure 8.11 present the proportion of burned specimens for wild mammals, domestic mammals, cattle, birds, turtles, snakes/lizards, fish and commensal rodents[53]. These data illustrate that wild taxa (except for fish) are more often burned than domestic specimens. Furthermore, nearly one-quarter of all turtle remains are burned; the majority these remains were identified as carapace or plastron fragments, suggesting a

[53] Details and descriptions of these analytical categories are presented in Chapter 7, where they are first discussed. The sole difference herein is that pig remains (n=5) are considered within the class of wild mammals, as the proportion of burned pig remains (5/46, or 12%) resembles the patterning of wild, rather than domestic, mammals. Also, recall in Chapter 7, I argue that age profile data suggest pigs were hunted and brought to the site, rather than raised as domestic stock.

manner of cooking these animals within their shells. In addition, the very low occurrence of burned rat/mouse remains (n=2) buttresses the interpretation of these animals as largely intrusive to archaeo-sediments at the site.

Taxonomic Category	NISP burned	Total NISP	% burned
Wild mammals	12	86	14
Domestic mammals	8	149	5
Domestic cattle	50	567	9
Birds	72	577	12
Turtles	56	233	24
Snakes/Lizards	13	97	13
Fish	18	260	7
Commensal Rodents	2	248	>1

Table 8.20 Number of burned specimens and percentage of total NISP for various taxonomic categories.

The proportion of different types of burning within these various categories suggests various approaches to meat preparation (Figure 8.12). Although the remains of domesticates demonstrate the lowest incidence of burning (not considering commensal rodents), these remains contain the largest proportion of partially charred bone, suggesting that medium- and large-bodied domesticates were more likely to be prepared via roasting. The concurrently low incidence of burning within the remains of these animals, however, indicates that such roasting occasions were relatively rare. This suggestion is congruent with the discussion presented in Chapter 7, suggesting that such animals were important to the subsistence economy for secondary products rather than their potential to provide meat. In contrast, the remains of turtles, snakes, fish and commensal rodents contained no partially charred bones. Over 80% of all turtle bones are grey/calcined, however, evidencing prolonged exposure to heat, which may be

interpreted as evidence for exposure to high temperature, anthropogenic fires (David 1990:75). This high proportion of calcined turtle remains may serve as evidence of the practice of roasting these animals in their shells[54]. Although calcined bones are regarded as an unreliable indicator of cooking practices per se, the predominance of a single type of heat exposure within this taxonomic category suggests a distinctive method of preparation.

Unfortunately, the predominance of carbonized burning within other classes of animals cannot be as clearly understood with regard to specific modes of meat preparation. Carbonization could occur as animal bones were thrown into hearths as fuel, trash, or as a means to reduce the attractiveness of these bones to scavengers (Gifford-Gonzales 1989:187). Burning could also occur post-depositionally, as bones are deposited within matrixes or atop surfaces later subject to burning. This scenario is likely to explain much of the burning in Block B, where a collapsed wattle and daub structure presented evidence of in-situ burning. Furthermore, it is possible that Block B and the Eastern Upper Terrace deposits were prone to brush fires intended to clear land, as these units are located in open areas that have been tilled and cultivated in the recent past; these areas could very well have been useful in the same regard following its Iron Age occupation.

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[54] Of the 70 specimens representing non-carapace/plastron elements, only 2 bore evidence of exposure to heat. In contrast, 54 of the 162 carapace/plastron bones were burned in some way.

8.5 Chapter Summary

In this chapter, I have discussed patterns of animal use evidenced through various dimensions of the faunal record at Kadebakele; specifically, I have presented data regarding the distribution of species and body parts throughout the site, as well as signatures of carcass processing such as burning and butchery marks. These data indicate several general patterns of animal use with important socio-cultural implications.

First, the distribution of species throughout the site suggests that domestic and midden deposits contained a more even species spectrum, while megalithic contexts in the Southern Slope were dominated by domestic cattle remains, and Block A deposits contained predominantly bird remains. There was little evidence of differences between deposits within an area, and a stronger pattern of differences between areas overall. It is likely that a wide range of species was exploited for household-level consumption; this may have infrequently included domesticates such as caprines and cattle. However, the higher incidence of cattle in the Southern Slope megalith provides support for large-scale, communal consumption of these animals, rather than household-level portioning and distribution.

The distribution of body parts throughout the site also provided evidence for macro-patterning between areas, rather than within deposits of a unit. While most of the areas of the site appeared to be heavily dominated by foot and limb elements, the North Midden and Eastern Upper Terrace areas contained the closest approximation to the standard skeletal distribution. In addition, there appeared to be no clear correlation between the utility index of skeletal portions and their frequency; this was the case for

both wild and domesticated mammals of either size class. These data suggest that body parts were not heavily selected for as animals were dismembered following slaughter. Furthermore, it is likely that entire animals were brought to and disposed of at the site rather than partitioned and distributed by specialized butchers. The contents of the majority of the features resembled the surrounding matrix, as very few of these features retained the integrity of their cultural use-life. An exception to this trend is found in the Southern Slope where higher skeletal completeness could be observed in (megalithic) feature contexts than non-feature deposits. Features 12 and 13 in Block A also provided good evidence for intact faunal deposits intentionally placed in spatial context.

I observed that methods of meat preparation, such as cooking and dismemberment, left signature traces on faunal remains at Kadebakele. While many types of burned bone do not clearly indicate cultural processes of meat preparation, the predominance of burning among wild taxa suggest that wild fauna were more often cooked and eaten than domesticates were. Turtles, for example may have been cooked whole, possibly placed directly within a hearth. However, the pattern of partially burned elements in the assemblage suggested that when domesticates were prepared, they were more likely to be cooked by roasting on the bone. This manner of cooking large and medium-sized mammals is often associated with cooking large portions for communal consumption events. The diverse placement of butchering scars on skeletal elements within the assemblage is likely the result of non-centralized and non-standardized approaches to animal slaughter and dismemberment. However, large mammals (such as cattle) tended to have their lower limbs removed prior to preparation and/or transport

more often than smaller animals. Butchered specimens from a diverse array of taxonomic categories were recovered from the site, most often in Block A, Block B and the Southern Slope units.

Iron Age inhabitants of Kadebakele employed a multifaceted approach to subsistence, which included differential reliance on both hunted and domesticated fauna, as well as cultivated and wild plants. Animal remains were incorporated into domestic and ritual contexts through various socio-culturally mediated practices of slaughter, dismemberment, preparation and deposition. Evidence from the faunal assemblage suggests that such practices varied both with regard to the animal to be consumed, as well as the context in which consumption was to occur. In the following chapter, I will explore this contention in more detail, by examining the constituents of the megalithic deposits excavated in the Southern Slope and Block A areas as a means of discussing ritual and symbolic roles of animals during the Iron Age at Kadebakele.

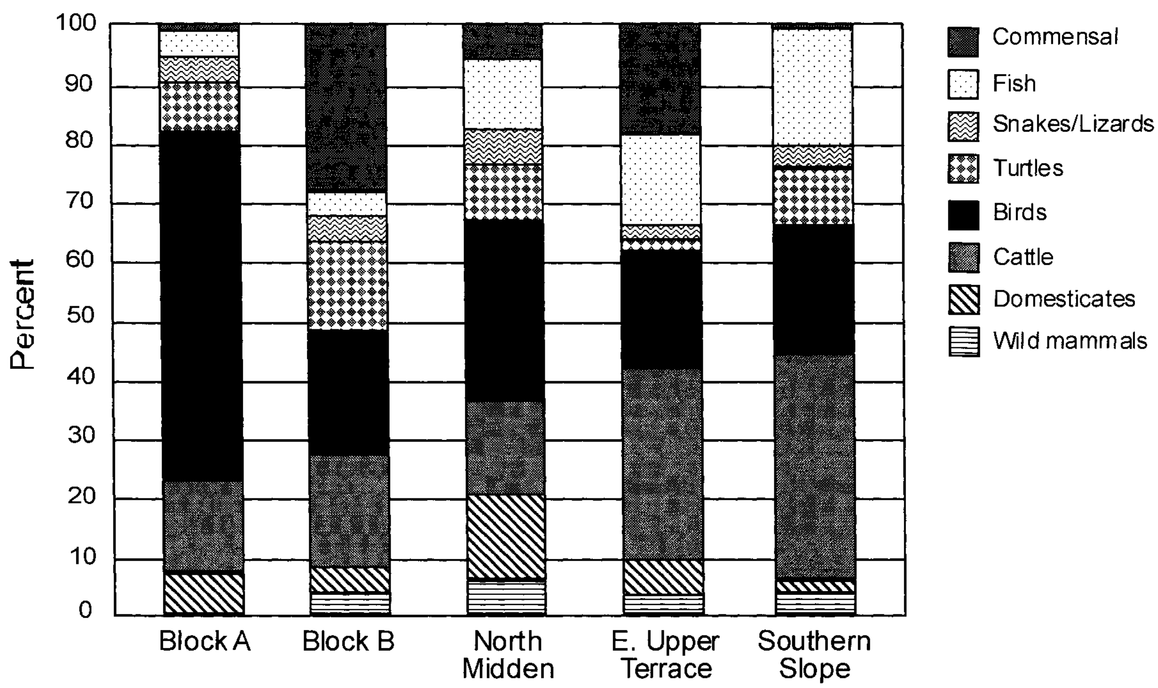


Figure 8.1 – Proportion of various taxonomic categories present in areas of the upper terrace (based on percent NISP).

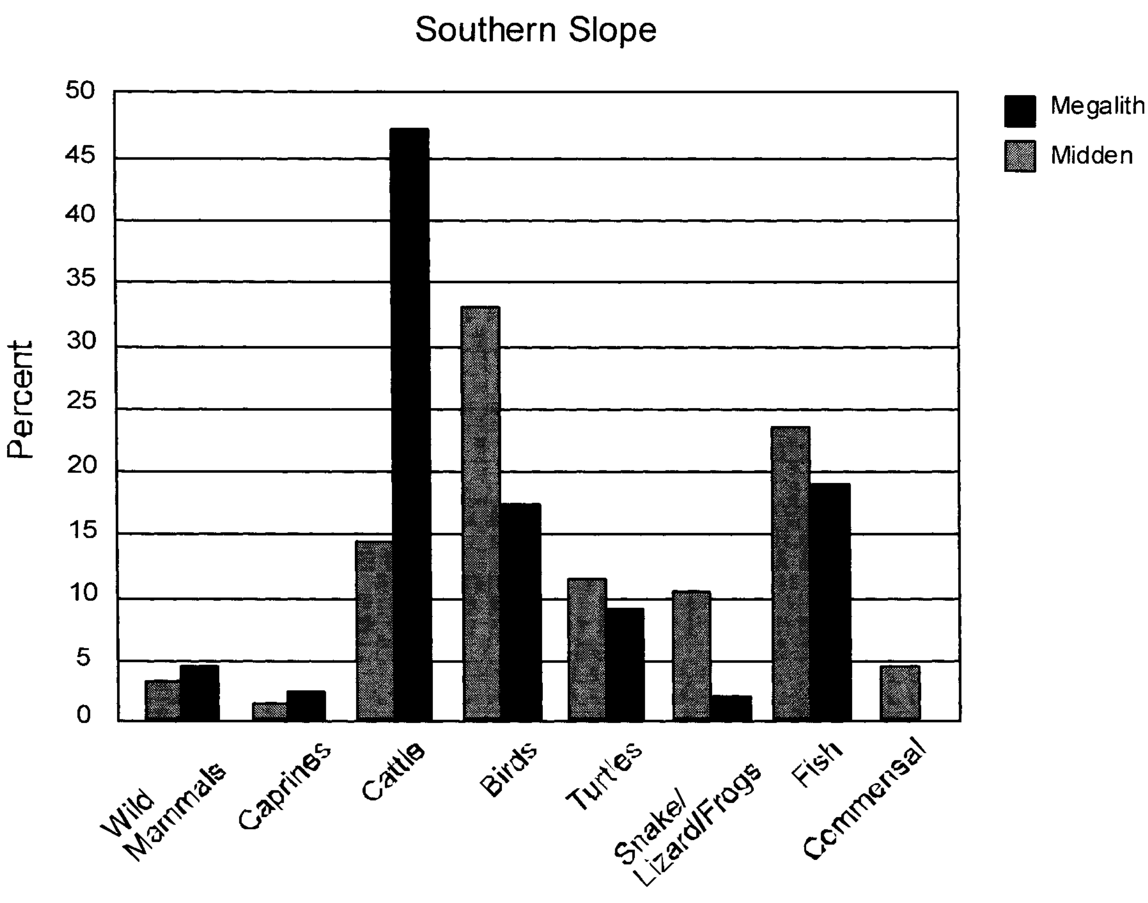


Figure 8.2 – Species distribution (based on NISP) within Southern Slope megalithic and midden strata.

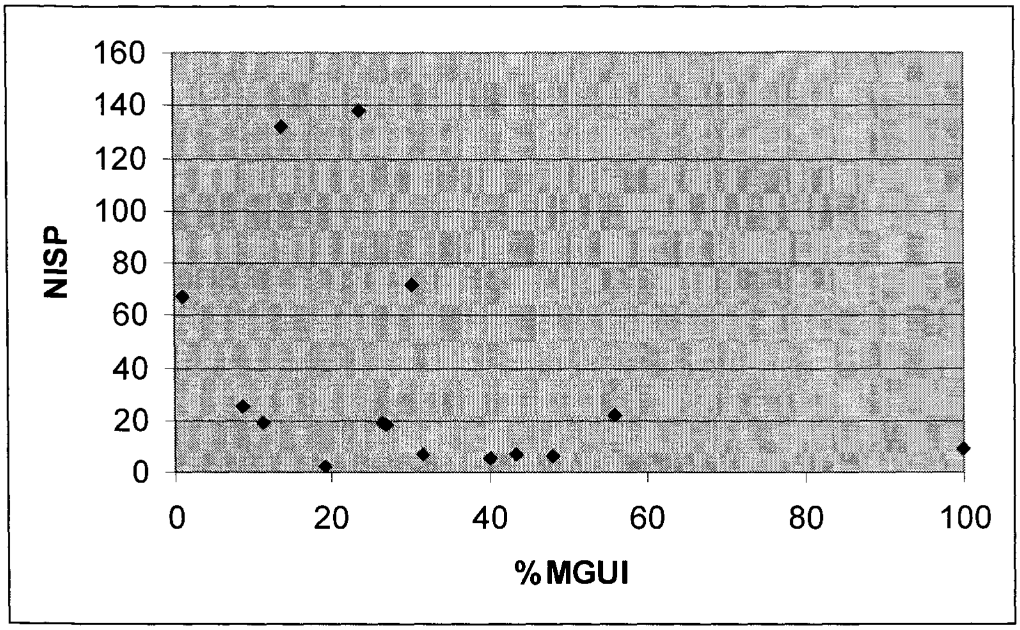


Figure 8.3 – Graph of NISP versus % MGUI values for cattle remains.

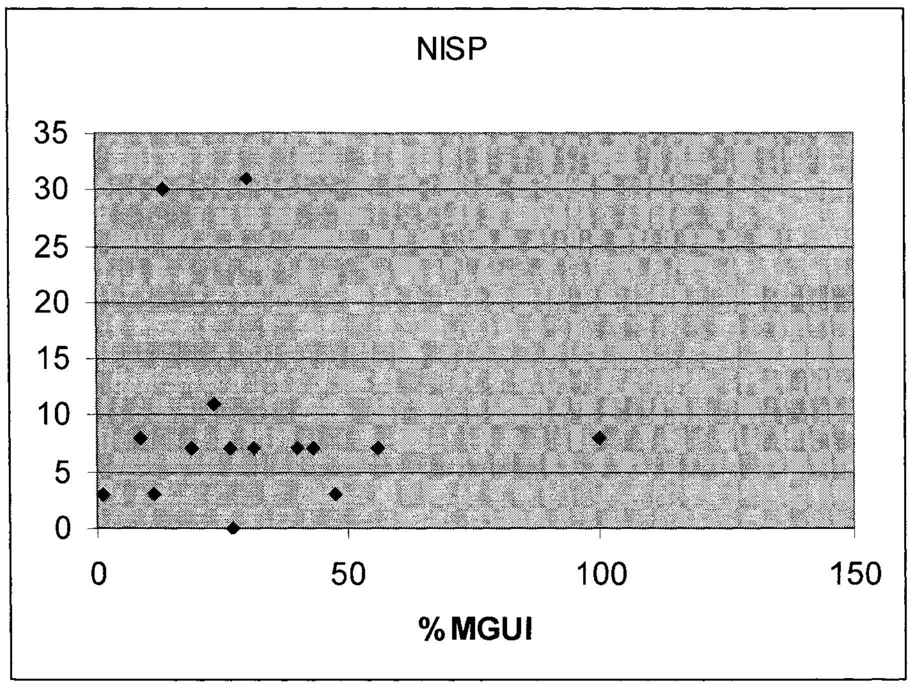


Figure 8.4 – Graph of NISP versus % MGUI for caprine remains.

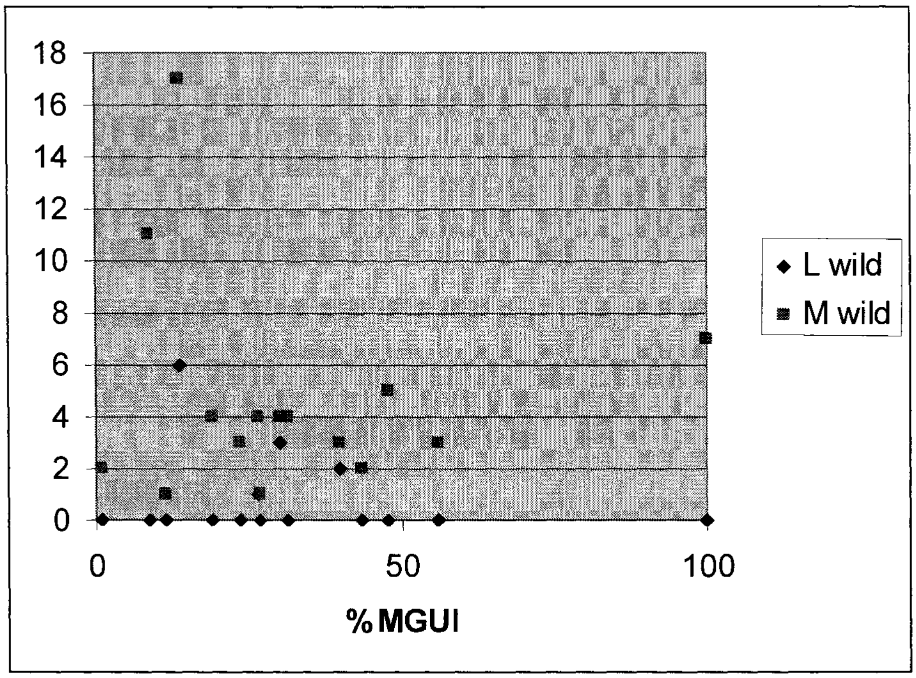


Figure 8.5 – Graph of NISP versus % MGUI for large and medium-sized wild mammals.

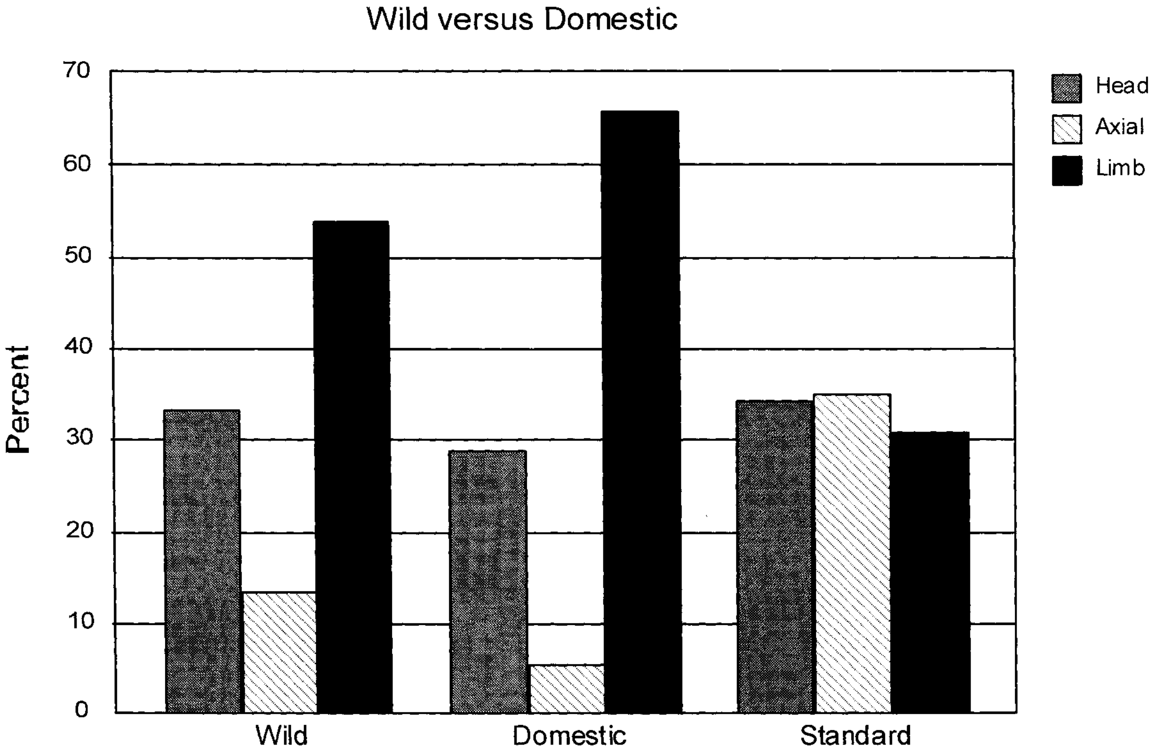


Figure 8.6 – Body part representation of wild versus domestic taxa (based on percent NISP).

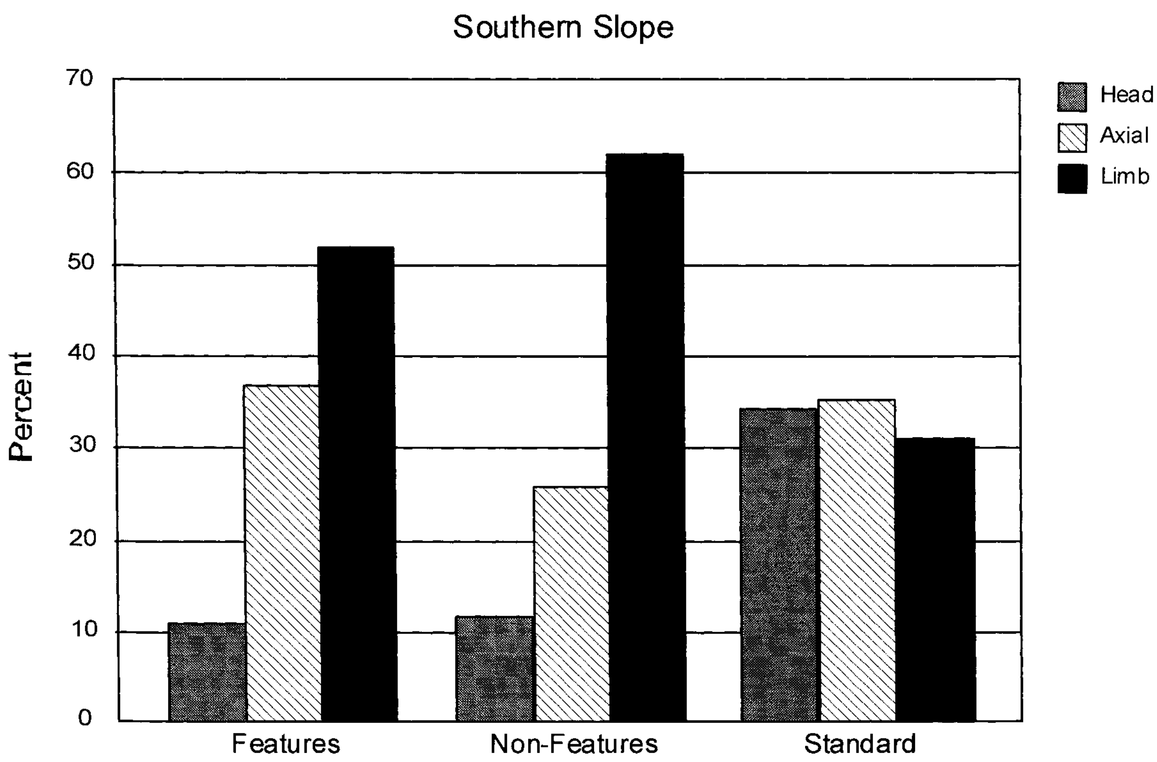


Figure 8.7 – Southern Slope large mammal part distribution by context (based on percent NISP).

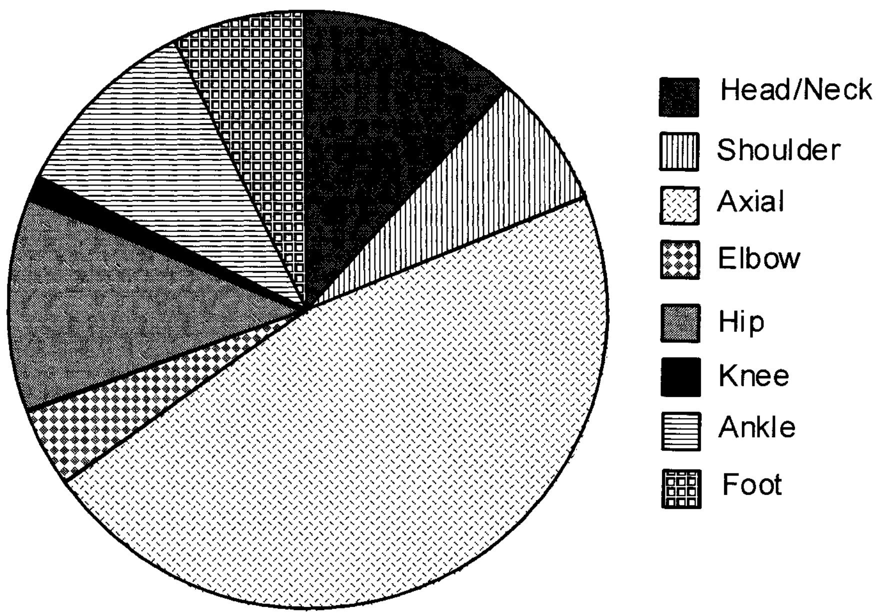


Figure 8.8 – Distribution of cut marks on large mammal joints by relative frequency.

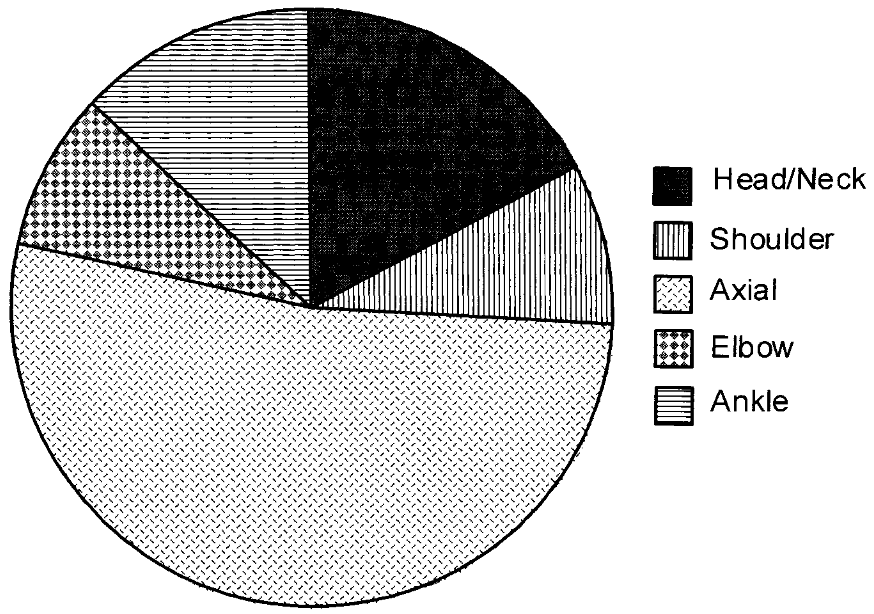


Figure 8.9 – Distribution of cut marks on medium mammal joints by relative frequency.

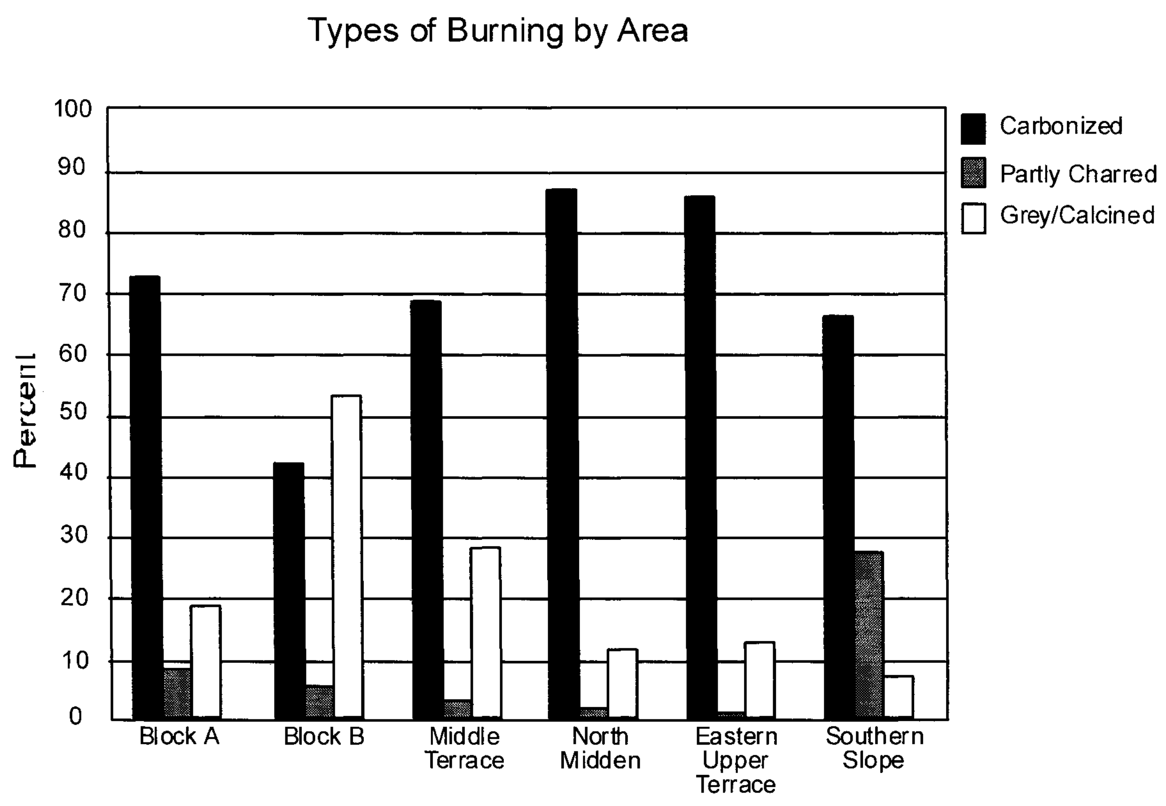


Figure 8.10 – Relative frequency (percent) of types of burning present in each area (based on percent NISP).

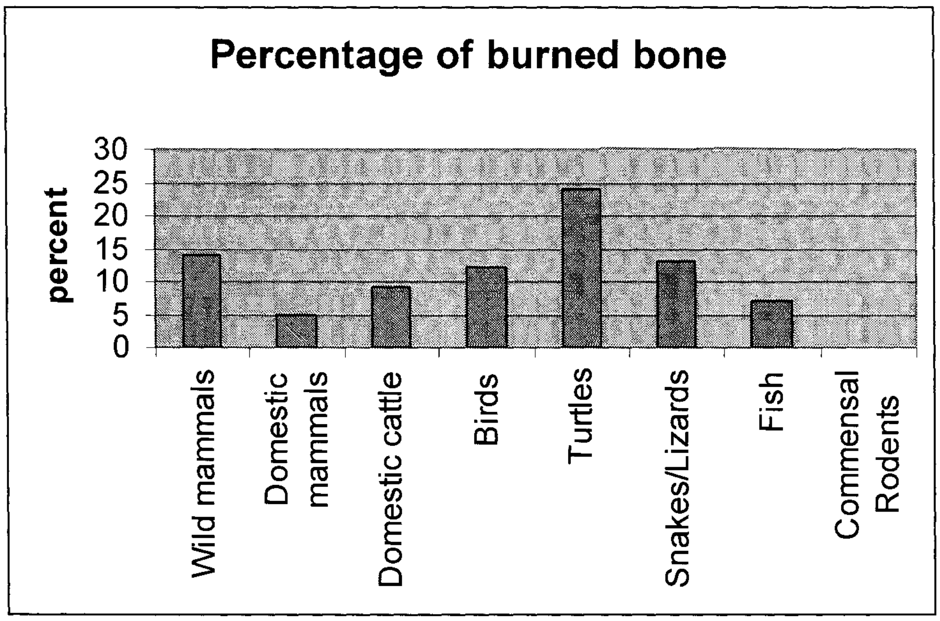


Figure 8.11 – Percentage of burned specimens among taxonomic categories (based on percent NISP).

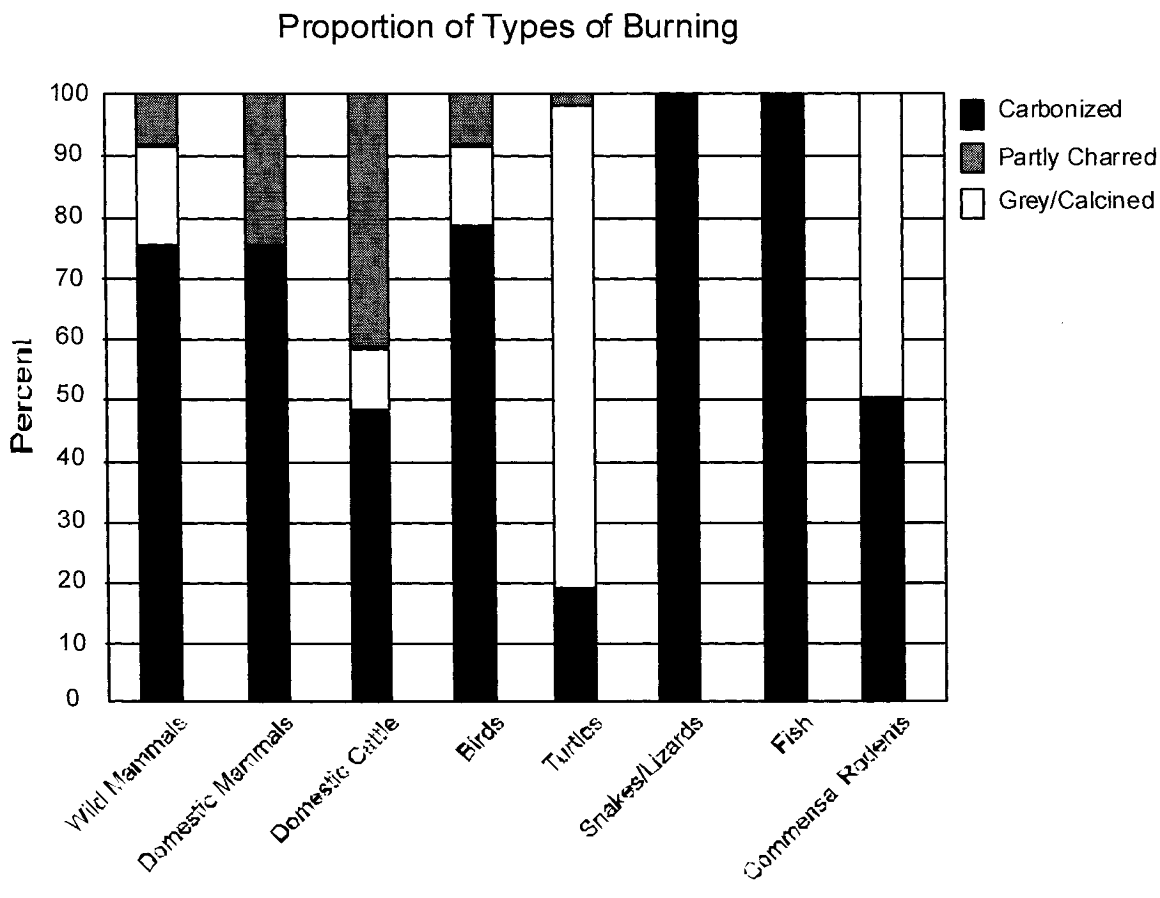


Figure 8.12 – Relative proportions of types of burning among taxonomic categories.

Chapter 9 – Ritual Use of Animals at Kadebakele

9.1 Introduction

Using megalithic structures and associated deposits on the upper terrace as primary evidence for ritual activities, in this chapter I discuss the ritual or symbolic roles of animals during the Iron Age at Kadebakele. Here, I present evidence suggesting that cattle were distinctively incorporated into ritual deposits, which testifies to symbolic meanings bestowed on animals (and animal carcasses) in the context of megalith construction. As presented in previous chapters, it is likely that the ownership of cattle denoted status and wealth to Iron Age residents of Kadebakele; in addition, the slaughter and consumption of these animals in the context of megalith construction may have served as a means of organizing labor as well an expression of social unity.

Discussions in the previous chapters have illustrated distinctive patterning of faunal remains in megalithic deposits that warrants further investigation. Specifically, the distribution of species indicated that midden deposits contained a wider range of species than megalithic contents, and the megalith features in the Southern Slope contained higher skeletal completeness for cattle than any other excavation area. Furthermore, my analysis has suggested that domesticated animals were reared for secondary products rather than meat, while non-mammalian taxa may have been consumed in quotidian meals. Although the cooking of domesticates tended to be rare, patterns of burning indicate that these animals tended to prepared via roasting more than any other animal,

with the highest proportion of charred bones recovered from the Southern Slope megalith.

My consideration of ritual dimensions of animal use is not predicated on what is often conceptualized as a dichotomous relationship between symbolic and economic realms of behavior (e.g., Grant 1989); instead, I recognize that ritual practices are not by nature precluded from occurring in "profane" contexts (i.e., middens [Moore 1986], or domestic structures [Beavitt 1989]). However, at Kadebakele, there was no compelling evidence for ritual activities within deposits of domestic refuse and structural debris. As analyses of other artifact classes within these contexts progresses, numerous lines of evidence will emerge that may challenge or corroborate my interpretations, and the scenarios presented below are certainly subject to revision and reinterpretation as more data is produced.

9.2 Ritual use of animals in Southern Slope

The lower strata of the Southern Slope area represent a complex sequence of construction within a megalithic structure. A series of pit features, ranging in size from very small (approximately 2 liters volume) to quite large (over 43 liters volume) were encountered beneath and between a series of seven lime plaster surfaces separated by layers of ashy fill. Although over half a meter of the sediment was excavated within the structure, the base of the megalith has not yet been established. However, it is clear that a sequence of building and deposition preceded the placement of large rocks on the megalith's upper surface. Although many depositional contexts were excavated within

the megalithic deposit, only a few have yielded sufficient information to warrant consideration here. Therefore, I will focus on a few particularly abundant contexts that inform on the incorporation of animals into these deposits.

Level 18 and 19

Level 18 in the Southern Slope unit contained an extremely high density (84.6 g/L) of faunal remains incorporated both within and beneath a plaster surface (surface 6); this level preceded the creation of the large pit feature (feature 3) and overlying rock alignments. The majority of the faunal specimens from level 18 were identified as cattle[55] remains (n=46 or 61% of the total NISP identifiable to taxonomic category), with many discovered in correct anatomical orientation within the deposit (Figure 9.1). Portions of at least two zebu and one buffalo were represented, in addition to numerous elements that could not be definitely attributed to one species or the other. Buffalo remains included all portions of the skeleton (sacrum, scapula, maxilla, tarsal, molars), while zebu remains were composed solely of lower limb elements (distal tibia and tarsals). However, many of these bones could not be identified as either zebu or buffalo, and have been classified as "cattle"; these skeletal portions included elements representing the majority of the skeleton (MNI=2). The cattle remains in this level were friable and often became broken in the process of excavation, producing many fragments that could only be determined as large mammal (n=800) in addition to many unidentifiable specimens (1068g).

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[55] Although this deposit was heavily dominated by cattle remains, wild animals such as sambar deer, birds, fish, and turtle specimens were also recovered, though in much smaller number (n<10). These remains may have been incorporated into this deposit as the contents of hearth sweepings or redeposited midden fill surrounding the cattle elements.

A few osteological markers of age on these specimens may allow some consideration of the age at death of the animals in this provenience (all age estimations based on Silver 1970). A zebu/buffalo fusing proximal femur and unfused proximal tibia suggest an age at death of approximately 3.5 years, as does the tooth wear stage observed on a complete cattle first molar. A fused distal scapula from a buffalo indicates an age over 1.5 years for this individual, as does a fused distal tibia belonging to a zebu. Therefore, cattle incorporated into this deposit appear to have been aged between 1.5 and 3.5 years, which is considered to be the prime age for slaughter for meat production (Dahl and Hjort 1976: 167; Cockrill 1967:125).

As stated in Chapter 7, determining the sex of animals from metrical evaluations can be complicated by small sample sizes; using the most numerous measurable dimensions for a species, sex profiles for *Bos indicus* were produced based on the proximal breadth of the first and second phalanges (see Chapter 7). In level 18, measurable phalanges came from zebu/buffalo specimens, and fell above the mean for *Bos indicus* in both instances[56]. If these two animals were zebu, then they may represent bulls or castrated males (figures 9.2 and 9.3); however, if these animals were both buffalo, sex cannot be inferred from this comparative exercise.

No specimens in level 18 were burned, and only two bones suggested that cutting or dismemberment had taken place. These marks were observed on a buffalo distal scapula and zebu distal tibia, suggesting the removal of the fore- and lower hind-limb. However, high skeletal representation in this level suggests that much of these animals'

[56] For proximal first phalanges, Bp=27.96, 32.25; for proximal second phalanges, Bp=28.10, 31.78.

skeletons became incorporated into this context; therefore, dismemberment in this case may not indicate distribution.

These lines of evidence suggest that the fauna in level 18 represents large portions of cattle remains. The animals incorporated into this level may have been partially disarticulated prior to deposition, but the presence of unfragmented elements and skeletal completeness suggest that limbs were not substantially reduced or distributed before being placed in this level. In fact, these portions may not have been consumed at all, as these bones lack evidence of burning and were partially-articulated in situ[57]. Further, these portions appear to have been covered by a plaster surface (surface 6) some time following deposition; this surface was apparently created prior to decomposition, as the interment bore no evidence of carnivore gnawing and appeared to have been protected from scavengers.

These constituents of level 18 stand in contrast to the immediately underlying stratum (level 19), which contained a similarly high faunal density (77.7 g/L), but revealed extensive burning on bone (43% bear evidence of exposure to heat) and surrounding artifacts. Such a high concentration of calcined and partially charred remains may evidence cooking or roasting of large portions of meat. While a more diverse array of animals is present in level 19 than the overlying level (including canids, pig, birds, fish and reptiles), cattle constitute the largest proportion of identifiable elements (n=19, or 27%). However, cattle remains from this level represent primarily lower limb elements,

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[57] Kelly (2001:348) is able to correlate abundant blowfly pupae within a pit deposit as evidence that deer portions were disposed of with meat still attached to limbs. Unfortunately, no such entomological evidence was visible in any deposits at Kadebakele.

which were haphazardly distributed throughout the level (in contrast to articulated skeletal elements in level 18). These non-meaty elements may reflect the discard of these portions.

Scattered atop a plaster surface (surface 7) lined with small stones, the fauna in level 19 may represent the remains of communal consumption preceding placement of the animals interred in level 18. With an MNI of two zebus and one buffalo, the specimens present in level 19 resemble the animals in level 18. Further, fusion data[58] and metrical data suggest that the animals in level 19 resemble the animals interred above (figure 9.1 and 9.2)[59].

The entirety of two zebus and one buffalo could not have been interred in level 18; much of these animals may have been consumed, while only a few portions were deposited, perhaps to mark the event of megalith construction. The remains of three cattle within a single deposit also suggest a large social group involved in the consumption of the meat, and possibly in the provisioning of suitable animals to mark the occasion. Further, the slaughter of three (or more) prime-aged cattle may be considered an act of some sacrifice, as these domestic stock could represent wealth and prestige to their owners (Russell 1999); as discussed in Chapter 7, it is likely that cattle were kept until advanced age for both labor and milk producing capabilities. The killing of an animal before it had fulfilled its potential in these regards could certainly be considered a loss to

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[58] An unfused large mammal proximal calcaneus provides an age of death between one and two years, while a fused zebu/buffalo distal tibia indicates an animal above 2 years of age.

[59] The proximal breadth of a zebu second phalanx (Bp=30.52) is over two standard deviations larger than the mean, suggesting that this element came from a zebu bull. The proximal breadth of a zebu first phalanx (Bp=29.7) is over one standard deviation larger than the mean, and may represent a castrated zebu male. Recall that the metrical data from level 18 suggested that a zebu bull and castrate could have been represented.

the owner(s). Furthermore, the slaughter of a prime-aged cow or buffalo and apparent non-consumption of certain high value portions underscores the symbolic weight of the act.

Levels 15 and 16

Moving up stratigraphically in the Southern Slope unit, levels 15 and 16 consist of an eroded plaster surface (surface 5) and underlying loose ashy silt constructed following the creation of levels 18 and 19. Here, the density of faunal remains was quite high (55.4 g/L), and was dominated by cattle (n=14, or 70% of identifiable specimens). Specimens representing other taxa may have been incorporated into this deposit unintentionally, perhaps within the matrix of ashy fill that may represent the cooking fire used to prepare the meat; these fragments are generally small[60] and may represent fuel used for the cooking fire, or fragments swept into the fire's ashes as it was cleared and redeposited. Only two specimens in levels 15 and 16 are partially charred, which does not provide strong evidence for roasting of meat. However, 4% (n=45) of the total specimens from this level are carbonized, while 3% (n=31) are calcined, suggesting some bones were subject to prolonged exposure to heat as could have been used as fire fuel. All but one of the burned bones are fragments which could not be identified to taxonomic category, buttressing the interpretation that the ashy matrix and associated small fragments of bone were introduced into this level through the deposition of cooking fire remains. Furthermore, lack of burning on the cattle elements (except for one phalanx) indicates that these portions were deposited without being exposed to hear.

[60] Average fragment size for non-cattle bones is 1.2 g/specimen versus 16.2 g/specimen for cattle bones.

The cattle portions represented in this deposit are exclusively head and lower limb bones, all of which could have been taken from one zebu (MNI=1). This representation is characteristic of the removal and discard of low-value portions prior to the distribution of the remaining carcass. However, no butchery marks were visible within these levels to corroborate this hypothesis. Fused phalanges and distal metacarpal represent an animal older than 10 months of age, while tooth wear (from a zebu/buffalo) displays patterns consistent with adult status. Metrics from first and second phalanges within this deposit fall within one standard deviation from the mean for zebu[61], indicating that this individual was probably a male castrate or large-bodied female (figures 9.2 and 9.3). Whether this animal was preferentially selected for slaughter or died of natural causes is uncertain; however, it was likely to have been dismembered with low-value parts deposited in these levels while the remainder of the carcass was distributed and deposited elsewhere, perhaps as part of a communal food-sharing event associated with the early stages of megalith construction. Following deposition, this deposit was covered with plaster, in a manner resembling that described for level 18.

Feature 3

Feature 3 in the Southern Slope area was a large, plaster-lined pit containing a high density of faunal remains (62.6g/L) constructed following the creation of levels 15 and 16; the pit apparently contained a thin lens of river cobbles at its base prior to being filled with ash, artifacts, and fauna. This feature was also capped by a thick lining of plaster (surface 2). The feature extended into the southwestern wall of unit -21.6E/-204N,

[61] One measurable zebu first phalanx is slightly larger than the mean (Bp=27.0) while all measurable second phalanges are slightly less than the mean (Bp=25.29, 25.64, 25.75).

such that the exact size or total contents remain undetermined. Cattle bones constituted the highest percentage of identifiable specimens (n=34, or 37%) within this deposit, although goat, bird, turtle and fish remains are also present in smaller numbers. These other animals are represented by small bone fragments[62] that may have been incorporated into the deposit within the contents of the cooking hearth, which was later used to fill the feature.

Two zebus and one zebu/buffalo are represented by the identifiable elements. It appears that animals of all age classes are present within this deposit, though the largest proportion of bones are from adult animals. Based on fusion schedules (Silver 1963), a fetal/juvenile zebu is represented by a poorly formed astragalus, while an unfused distal tibia and fusing distal scapula suggest a zebu of early subadult status (1 to 1.5 years). The zebu/buffalo remains represent an adult animal, based both on both tooth wear patterns and a fused distal tibia. Metrical data indicate that the fetal/juvenile animal was possibly a female[63]; however, small size may also be a function of age rather than sex in this case. The subadult zebu remains represent either/both intermediately sized-castrates or large-bodied females[64] (figures 9.2 and 9.3).

Although the sediment in Feature 3 bore evidence of burning, very few of the faunal remains recovered from the feature are burned (n=34, or 2%). Furthermore, all of the burned specimens were highly fragmented bones that could not be identified to

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[62] The average fragment size for non-cattle bones is 1.12g/specimen for non-cattle versus 15.76g/specimen for cattle bones.

[63] This is based on one unfused zebu first phalanx (Bp=21.41).

[64] Two fused zebu first phalanges were measurable in this deposit. One falls within one standard deviation below the mean, while one falls within one standard deviation above the mean (Bp=25.00, 28.21). A fused second phalanx falls within one standard deviation above the mean (Bp=27.33).

taxonomic category; these likely represent bone fragments that were incorporated into the feature within the redeposited cooking hearth. The majority of cattle elements within this deposit appear to be non-meat bearing lower limb and foot elements, some of which were lying in correct anatomical orientation. Only one large mammal long bone fragment was observed to bear evidence for cutting or butchering of the carcass.

Lack of burning, cut marks, and low skeletal completeness coupled with the predominance of low-value portions are consistent with discard patterns involving the removal of non-meat bearing portions in order to lessen the weight of meaty limbs. Portions representing three individuals from distinct age classes may have been an intentional pattern of culling that sought to include young, subadult and full grown animals as part of the slaughter event. Alternatively, these animals could have died in close succession from natural causes (perhaps precipitating a sense of crisis that needed to be resolved through ritual practices?), and their remains were deposited within this pit as their bodies were partitioned and distributed. The filling of this plaster-lined and capped pit feature does not clearly indicate the length of time between slaughter events, although the general lack of burning and articulation of the skeletal portions suggests the elements were deposited while still fleshed. As such, the deposition and subsequent capping of the feature must have occurred in some rapid succession to avoid the smell of decomposition attracting scavengers and carnivores to the site. Complete absence of any carnivore ravaging on the bones in this assemblage suggest that this tactic proved successful.

Southern Slope Summary

In summary, the megalithic deposits in the Southern Slope include a series of plaster surfaces, ashy deposits and pit features which contain evidence for large-scale consumption events involving the roasting of cattle portions. Cattle (both zebu and water buffalo) remains dominate the faunal assemblage within these strata; small fragments from other taxa are also present, although perhaps unintentionally incorporated into the ashy remains of cooking fires used to prepare the cattle. Articulated elements in-situ, high body part representation and lack of burned elements within level 18 suggest that complete cattle limbs were interred while still bearing soft tissue. Parts of these individuals may have also been consumed and deposited underneath in level 19; elements in this lower level bore evidence of having been roasted. Other deposits contained articulated lower limbs elements, further suggesting that portions were discarded while still fleshed. As such, the plaster created atop these levels must have been placed relatively quickly afterwards to avoid attracting scavengers to the area. Individuals of varying age and sex were consumed during these events (see figures 9.2 and 9.3), and as such, selection criteria for animals used in such ritualized activities cannot be clearly delineated. It is possible that all of these animals died naturally, and their deaths stimulated the communal sharing of their meat.

9.3 Ritual use of animals in Block A

The Block A area of the upper terrace contains a different array of megalithic constructions than those present in the Southern Slope region. Block A is constituted by visible surface alignments, with both large and small circular arrangements of stones. Because the deposits in this area are shallow, they are more likely to have been disturbed over the millennia by seasonal run-off or erosion from the nearby boulder outcrop. Although no radiocarbon dates have been established for this area, activities in Block A are suspected to post-date the major occupation of the upper terrace, some time after the Iron Age (Sinopoli 2005). However, excavations did not explore far beneath the surface in this area, so it is possible that contemporaneous activities took place in Block A as well. The features uncovered in this area are quite different from those summarized above, with many containing very few faunal materials and therefore bearing little to no evidence for animal use practices.

In general, the contents of the features in this area do not differ significantly from the surrounding matrix (see Chapter 8), suggesting that the features in Block A were not intentionally or selectively filled with the remains of particular animals, or that behavior associated with creating and filling of features did not involve intentional selection of different animals. Furthermore, this area contained no evidence for conjoined elements, and most of the portions represented are non-meat bearing lower limb and foot bones. It is likely that faunal constituents of Block A deposits were produced primarily through the disposal and discard of domestic trash, and the generally high proportion of birds in this area may not be evidence of symbolic behavior associated with megalithic monuments so

much as further testimony to the contribution of avifauna to subsistence strategies, even following the Iron Age.

However, the faunal remains contained in features 12 and 13 provide some interesting insight towards the symbolic and ritual activities associated with the construction of Block A megaliths. Feature 12 was a small cobble ring (approximately 0.6 meters in diameter) that contained little else but a *Bos/Bubalus* maxilla and an iron projectile point. Tooth wear on this individual suggested that it was a sub-adult, but no other information could be gathered from the specimen. The iron projectile point was just touching the maxilla, and lay to its side. In feature 13, a shallow ash concentration located between a megalithic structure and ash deposit (features 9 and 11, respectively), a significant abundance of antler fragments were identified (n=81, or 66% of the total NISP). None of the antler remains appear to have been exposed to heat, although two fragments bore evidence of having been cut and polished slightly. The remaining constituents of the feature were composed of large- and medium-mammal fragments not identifiable to taxonomic category. This antler cache was unique, and may have been associated with the cattle skull portion deposited in feature 12.

9.4 Chapter Summary

The contents of the deposits in the Southern Slope and Block A megaliths suggest a symbolic importance of cattle, though the manners in which these animals were incorporated into various deposits is inconsistent. In contrast to the megalithic deposits in the Southern Slope, there is no evidence in Block A for communal consumption of these

large domesticates. The Southern Slope, however, contains various lines of evidence for cattle consumption, ranging from partial interment of numerous individuals to discard of low-value portions of a single animal. Furthermore, the age and sex of the animals included within the deposits appears to vary, such that no clear distinguishing factor can be discerned for the selection of these individuals. It is possible that patterns of deposition within the megaliths are related to a number of variables, including the sex and age of the animal, the means by which the animal was killed (slaughter versus natural causes) and methods by which their meat is prepared and consumed.

Consideration of these ritual contexts suggested a symbolic link between cattle and megalith construction, as indicated by the presence of (at least) three prime-aged individuals that were partially interred and consumed in the process of creating the Southern Slope megalithic structure. In contrast, given the shallow deposits of the megaliths in Block A, the heavy representation of birds in this area is likely to be a result of post-Iron Age subsistence activities rather than evidence for ritualized behaviors. However, a single symbolic deposit of a cattle maxilla and iron projectile placed within a small ring of rocks underscores the ritual significance of cattle even following heavy occupation of the site following the Iron Age.

Such practices, taken in concert with evidence suggesting that that Kadebakele was the locus of production, consumption and distribution of animal products, evidence dimensions of both distinction and sameness between inhabitants of the site. These practices are likely to interdigitate with aspects of the socio-cultural milieu of the Iron Age in the Indian subcontinent. The following chapter will weave the faunal evidence

presented in Chapters 7, 8 and 9 into a generalized picture of animal use at Kadebakele. Moreover, I will consider these patterns of production and consumption in terms of social differentiation, both among the Iron Age inhabitants of the site and between site inhabitants and the wider region, as well as consider the effect of long-distance influences on the role of animals in social life.

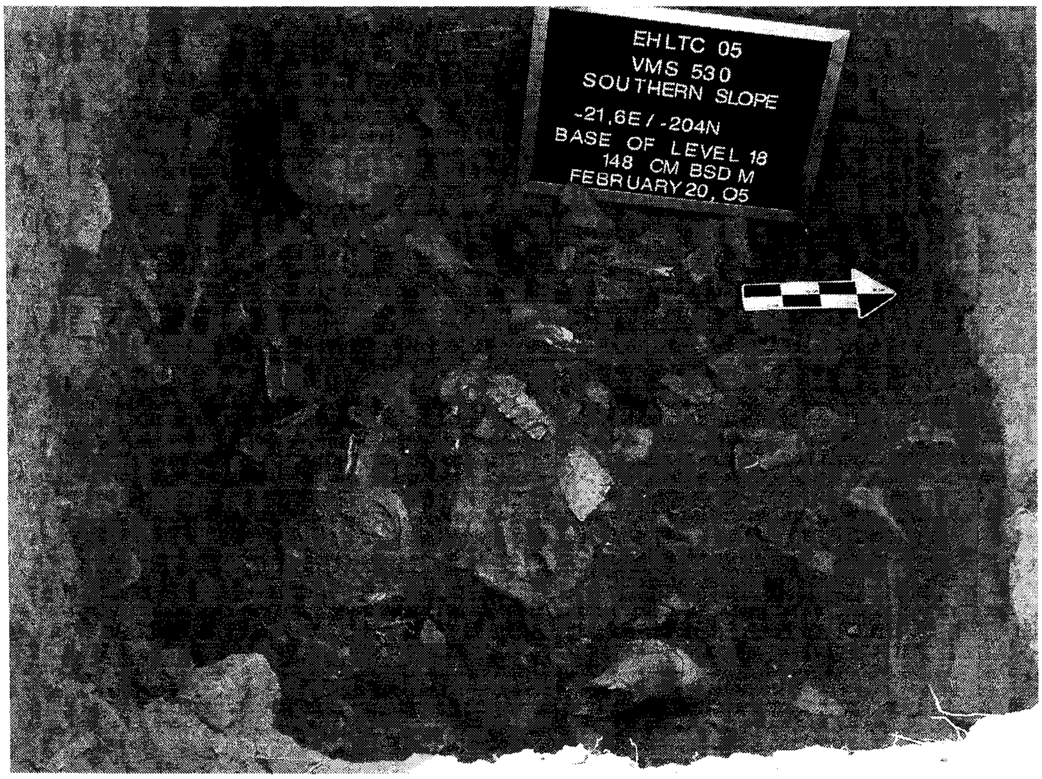


Figure 9.1 – Base of level 18 in Southern Slope megalithic deposit.

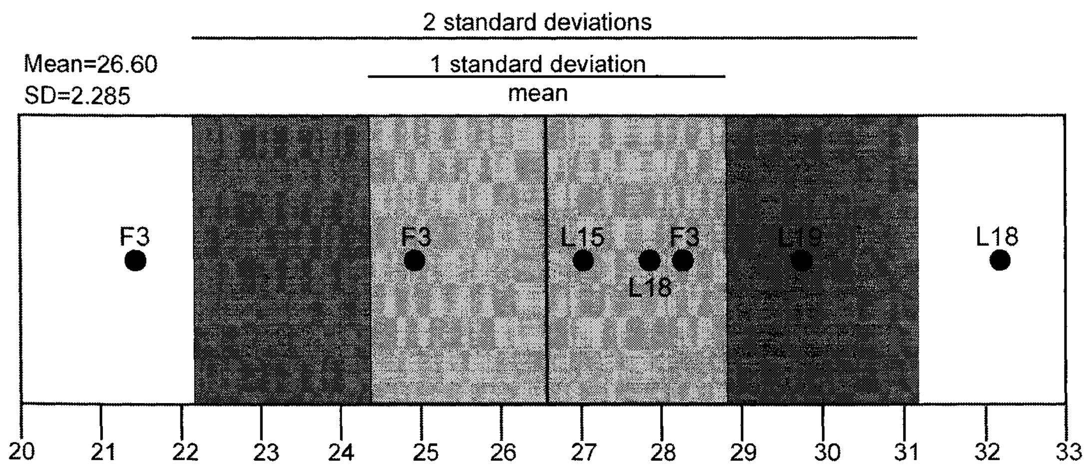


Figure 9.2 – Comparison of *B. indicus* first phalanx proximal breadth distribution at Kadebakele with specimens from Southern Slope contexts discussed in the text.

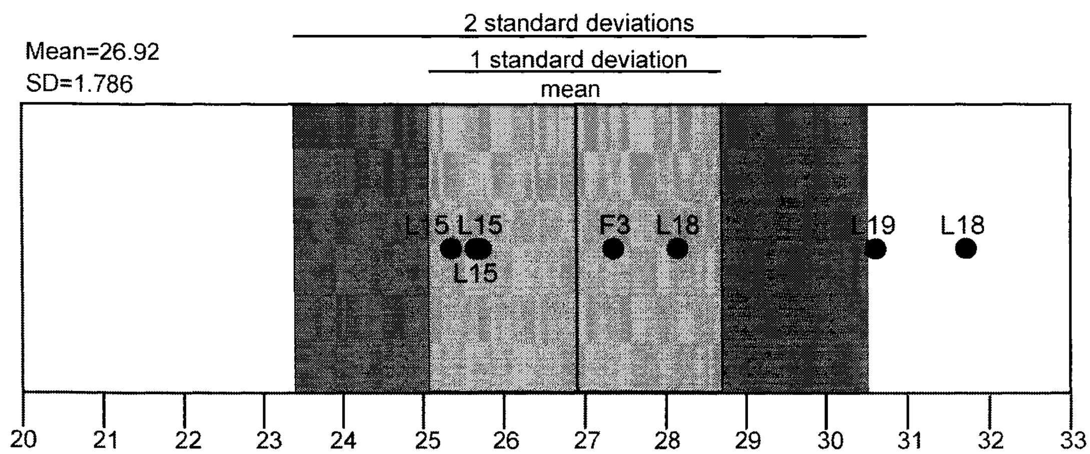


Figure 9.3 – Comparison of *B. indicus* second phalanx proximal breadth distribution at Kadebakele with specimens from Southern Slope contexts discussed in the text.

Chapter 10 – Synthesis and Conclusions: Animal Use during the South Indian Iron Age

10.1 Introduction

In this concluding chapter, I offer remarks that both summarize the data and analysis presented in preceding chapters, as well as consider the directions towards which future research might be undertaken in light of my findings. As the data presented in this study expand and elaborate on previous assessments of subsistence regimes during the South Indian Iron Age, our conceptions of subsistence during these periods must be altered, and our understanding of social differentiation similarly reconsidered. As expected, the fruits of my labor have stimulated more questions than answers, as many issues remain unresolved in an effort to develop a more accurate and thorough understanding of the South Indian Iron Age.

10.2 Animal Use at Kadebakele: procurement and consumption

This dissertation has provided significant insight into animal use during the South Indian Iron Age. It is the first systematic, detailed study of faunal remains during this period, based upon the largest collection of faunal materials from any South Indian archaeological site to date. Careful excavation, documentation and recovery have provided numerous lines of data regarding patterns of animal use by inhabitants of Kadebakele. The presence and distribution of numerous taxa, as well as the characteristics of many of the individuals within the assemblage has facilitated an

understanding of game procurement and herd management practices. In addition, patterns of body part representation, burning and butchery marks indicate varying approaches to carcass preparation. Last, the presence of cattle in ritual megalithic deposits bespeak meaningful associations between these animals and phases of building these structures, events possibly associated with large-scale feasting activities. As such, the subsistence base at Kadebakele can be described as flexible and dynamic, incorporating both domestic and wild animals into a structure of food-procurement that differentially involved various types of labor and invoked avenues of both social differences and similarities.

Hunting Practices

A wide variety of wild fauna was exploited by the Iron Age residents of Kadebakele. While larger bodied-game such as deer and bovids were present in the site's deposits, the remains of smaller-bodied taxa were more abundant within the assemblage. The paucity of wild mammals did not permit detailed assessments of age and sex for these creatures, and as a result, specific hunting or trapping strategies could not be addressed[65]. Smaller mammals included hare, mongooses and porcupine, while non-mammalian taxa such as birds, turtles and fish were relatively abundant in all excavated areas of the site. The domestication status of pigs remains somewhat unclear for the South Indian Iron Age as some analysts have identified domestic pig in their faunal assemblages (Clason 1975), while others (Thomas 1984; Nath 1968) have suggested that

[65] The range in which bones fuse throughout the mammalian developmental cycle rendered the meager fusion data collected for wild mammals somewhat useless. It is worth noting briefly that all observed elements from within this group of animals were fused, except for one blackbuck and four pig bones.

Iron Age pig remains are those of the hunted, wild variety (*Sus scrofa cristatus*, Wild Pig). There is currently no systematic means for differentiating the features of these two varieties, and given the relatively small presence of pigs at Kadebakele, I have suggested (see Chapter 7) that these animal remains most likely represent wild game.

The generalized midden deposits in the North Midden unit demonstrated a relatively even species spectrum, whereby bird remains constituted the most dominant taxa represented therein (one-third of all specimens in this unit). In addition, the remains of many of the wild mammals found at the site were recovered from the North Midden, and may serve as evidence of discrete consumption events. Commensal rodents (such as rats and mice) were relatively rare within most of the site's deposits, although they tended to be most common within the archaeo-deposits of Block B and Eastern Upper Terrace Units. I have suggested that many of these animals were intrusive to the archaeological proveniences, and are not considered in my discussion of hunting practices.

These data suggest that a range of species were exploited for daily consumption, with the contribution of non-mammalian taxa exceeding that of domesticated mammals. Of the animals endemic to the region (see Appendix I), an array of water fowl, game birds, reptiles/amphibians and fish would have been easily procured in the site's environs. While large (and potentially dangerous) animals such as panther, wild pig, and sambar are also present in the region, they tend to be quite rare in the Kadebakele assemblage in comparison with frequency of smaller, non-mammalian taxa.

Such a procurement pattern is consistent with opportunistic hunting strategies rather than the labor-intensive efforts involved in planned hunting expeditions (i.e., Binford 1980). The wild fauna used in everyday meals could have been easily captured nearby the site, or may have been encountered in the tending of fields (i.e., Linares' model of "garden hunting" [1976]). In addition, a quotidian diet reliant upon a diverse range of animals suggests that procurement of animals intended for consumption was not socially restricted. Birds, turtles and fish were central components of the Iron Age diet, and could easily have been trapped by individuals irregardless of gender or age. How procurement strategies articulated with agricultural or pastoral demands remains to be further investigated, as ongoing paleoecological investigations shed light on Iron Age agricultural regimes (A. Bauer et al. in review). It is also possible that the arduous climb to the upper terrace may have somewhat limited the membership of those undertaking consumption in this area to able-bodied members of society; alternatively, more feeble individuals living atop the upper terrace would have required assistance in procuring these food items.

Husbandry and Symbolic Dimensions of Cattle

The remains of domesticated mammals constitute approximately one-third of all identifiable faunal specimens at Kadebakele. Although they represent a minority of the assemblage by NISP, their dietary and economic importance is apparent in their predominance within the assemblage by weight (representing over 90% of the identifiable specimens by weight). The domesticates reared by Iron Age inhabitants consisted of zebu, water buffalo, and sheep/goat; while goats were decidedly present

within the assemblage, a number of bones could only be described as either sheep or goat. Horses were likely not kept at the site, and were quite rarely, if ever, present there; a single distal sesamoid from a domestic horse recovered from a variegated mixed-fill level in Block B is the sole evidence from the presence of this animal at Kadebakele.

Numerous lines of evidence suggest that the rearing of caprines (sheep/goat) and cattle (zebu and water buffalo) was a component of daily life for Iron Age residents of Kadebakele. The available data regarding the age at death of these animals indicated that the majority of them survived into adulthood (56% of cattle and 67% of caprines advanced to adulthood). Furthermore, osteological evidence representing animals of advanced age was not uncommon, and suggests that juveniles were not slaughtered at "prime-age" for meat off-take. Instead, herds were reared such that their potential to produce secondary products could be realized. In addition, metrical data suggested that the practice of castrating zebu bulls was undertaken to control the breeding population, as well as increase the labor potential of adult males. Pathologies consistent with use of cattle for traction labor were observed among a few specimens in the assemblage, and buttress the interpretation that secondary products such as dairy and labor were important to the Iron Age economy at Kadebakele.

This secondary products economy would have incorporated the herds in a number of ways. Both female cattle and caprines are milk-producers, and could have been used together to create a stable source of dairy year-round. Ethnographic observations suggest that the breeding of these animals is often coincident with the rainy season; in Northern Karnataka, the majority of rainfall currently occurs between June and October (however,

in Chapter 5 I suggested that there is no consensus regarding paleoenvironmental reconstructions of this area and how Iron Age climate may have differed from the present day). While zebu and water buffalo cows would have been able to provide milk during periods of abundant water and fodder (i.e., during and immediately after the monsoon), the breeding of goats is less seasonally dependant (Dahl and Hjort 1976: 92 – 93). For instance, Murty (2002: 298) has observed that among Kuruva goat pastoralists of Andhra Pradesh, kids are born between the months of August and November Female goats can kid twice per year; thereby goats could be used to provide milk for human consumption during drier months of the year.

Castrated male cattle were likely useful for traction labor, which may have been important with the expansion of rice cultivation in South India during this time. It is possible that water buffalo were preferred for these activities, as they have a physiological aptitude for preparing paddy lands. The nearby Kadebakele river terrace would have served as an attractive location for rice agriculture, although providing adequate forage for herds may have required some degree of transhumance during drier times of the year (Murty 2002: 297). Forage would have been available atop granite inselbergs in the Tungabhadra Valley (in fact, cattle and goat are currently brought to graze near the site) as well as in the valleys between these outcrops; however, the development of much of the irrigable, low-lying land in the region has made the task of identifying pastoral encampments (or any other archaeological sites that may have existed) nearly impossible. Furthermore, in the absence of horses, zebu-drawn carts could have facilitated contact and trade with other communities in the region.

The importance of secondary products in the Iron Age subsistence economy would have almost certainly imbued these domesticates with a great deal of social value, perhaps even denoting wealth to their owner(s). Indeed, the inclusion of numerous cattle in various levels of the Southern Slope megalithic deposits indicates a ritual importance bestowed on these animals, at least in the context of megalith construction. Caprines, on the other hand, were likely valuable for their dairying potential but were unlikely to be ritually significant. Mortality and body-part distributions indicate that these smaller-bodied animals were more likely to be included in small-scale meals than cattle were (see below); furthermore, caprine remains are absent from any ritualized contexts.

Consumption of Animals

The base of consumable resources used by Iron Age residents of Kadebakele included meat, dairy and grain products; my research has elaborated on the contribution of animals and animal products to the resource base, while the importance of cultivated grains have been discussed elsewhere (A. Bauer et al. in review; Morrison in press; Fuller 2003; Kajale 1991; see also review of subsistence regimes in Chapter 4). Before discussing patterns of animal consumption, it is important to note that the number of people supported by a resource base is an important component of a subsistence strategy. Although very little is directly known about the demography of the residents of the site, archaeological evidence suggests that a stable, residential community inhabited the upper terrace (Sinopoli 2005). However, demographic changes such as population growth, migration, warfare and group fissioning would have also altered the community constituency, thereby impacting subsistence strategies.

Faunal evidence suggests that the quotidian diet of Kadebakele's residents included a large proportion of small, wild game in addition to the meat of domestic stock. Age and sex profiles also suggest that female cattle and goats could have provided milk for human consumption nearly year-round. While NISP values emphasize the significance of non-mammalian taxa (which make up over 50% of the total NISP of identifiable specimens), Table 7.2 showed that domesticates such as cattle and caprines dominate the assemblage by mass (constituting 91% of the total mass of identifiable specimens). These valued suggest that domesticates were a significant contribution to Iron Age diet, and taken in concert for the general importance of secondary products in the subsistence economy, it is likely that cattle and caprines were less commonly used for meat.

The remains of wild taxa appear to be more often subject to burning than the remains of domesticates, buttressing the suggestion that these animals were more often cooked and consumed than domesticates. For example, the high incidence of calcified bones among turtle remains may evidence a particular mode of preparation; it is possible that such patterning indicates that these animals were cooked within their shells by placement within hearths to roast. The abundance of wild fauna in the North Midden deposits further suggests that these animals were a central component of the daily diet. In addition, the remains of medium-sized taxa such as caprines are relatively higher in the North Midden deposits. In the absence of evidence for the storage or preservation of meat, these data beg the question of whether an entire goat could be consumed at the household level. Once slaughtered, portions of these animals could have been distributed

to other groups; high fragmentation of medium-sized mammal remains, coupled with low skeletal integrity and completeness within domestic refuse contexts suggests that these animals were portioned and distributed between groups. However, high body part representation in the North Midden indicates consumption and discard of the entire animal. Therefore it is likely that medium-sized animals were partitioned and shared for small-scale consumption, with the majority of discard occurring in the generalized midden area.

There also appears to be a difference with regard to the processing of animals with regard to scale and context of consumption. Meat prepared for small-scale consumption appears to have been subject to more intensive processing, as the remains of medium-sized mammals constituted a greater proportion of the midden assemblage than large mammals. The remains that could not be identified to taxonomic level beyond body size could represent animals more thoroughly processed. As such, it is possible that medium-sized animals were subject to preparation methods that required greater fragmentation; perhaps the meat was included in stews, for example (Russell 1999:163). In contrast to a low incidence of butchering marks on medium-sized animals, large mammal remains demonstrate a higher frequency of cut marks on lower limb and foot elements. It is likely that such non-meaty appendages were commonly removed prior to the distribution and preparation of these carcasses. Furthermore, the variation in placement of marks throughout the large mammal skeleton suggests unstandardized approaches to slaughter and dismemberment.

The distribution of burning across taxonomic categories indicates that domesticates were more likely to be prepared via roasting. Burning of bone often leads to higher degrees of fragmentation; similarly, transforming a carcass into consumable cuisine of entails processes of reduction and fragmentation. However, large mammal specimens tended to be more massive fragments, perhaps reflecting less-intensive processing of the carcass. In addition, cattle remains from the Southern Slope megalithic strata indicate a predominance of partially charred specimens, indicating a practice of roasting large portions of meat on the bone. This manner of preparation appears to be correlated with large-scale consumption events as part of ritualized megalith construction.

10.3 Patterns of Animal Use in Ancient South India

Although there is a paucity of comparable faunal assemblages in peninsular India with which we can compare the results from Kadebakele, a few general comments can be formulated regarding regional patterns of animal use from the South Indian Neolithic through Early Historic Periods. Here, I will discuss relationships of exchange thought to exist between farmers and foragers during Indian (pre)history. In addition, I will consider the significance of feasting activities in the context of monument construction throughout these periods.

Hunting practices and farmer-forager interactions

There have not been enough well-sampled faunal assemblages to form the basis of adequate comparisons in order to present a robust argument for changes in animal use over time in the region. However, the current state of knowledge indicates that Neolithic ashmound and habitation sites contain an abundance of cattle remains, suggesting both economic reliance on these animals, as well as a socially meaningful significance, evidenced by the large-scale accumulation and burning of dung and bones. The screened faunal assemblage from VMS 110 yielded a species spectrum quite similar to other Neolithic sites in the area (Monahan in press), suggesting that the dominance of cattle is not necessarily a function of sampling strategies. However, it is important to note that such interpretations are subject to revision, as the abundance of non-mammalian taxa in South Indian archaeological assemblages is currently unclear because these animals have often been recorded as simply present or absent (Thomas 1984), while mammalian specimens are recorded as NISP values.

Miracle's (2005) investigation of Neolithic and Iron Age deposits in Kurnool district (Andhra Pradesh) reveal an alternative scenario to the cattle-dominated settlement sites in peninsular India; he observed assemblages dominated by wild animals such as large bovids, hare, porcupine, rodents and bats. These assemblages contrast with contemporaneous deposits from settlements throughout peninsular India where the remains of these wild fauna are generally low. Such marked patterning at the caves and rockshelters in Kurnool District indicates sporadic use of these specific locales for procurement of wild resources; furthermore, the near absence of domesticates within

these assemblages demonstrates that domestic stock were neither brought nor consumed at these sites (ibid). If these deposits reflect the activities of discrete hunting/foraging groups, these individuals appear to have maintained identities and lifeways distinctive from their agro-pastoral neighbors; in addition, there may have been some avenues of contact and exchange between these groups.

Ethnoarchaeological research in Andhra Pradesh has documented interactions of exchange between forager groups, such as the Boyas and Yerkulas, and agriculturalists in the region (Murty 1994, 1992). Such relationships are likely to have a long history throughout the subcontinent, evidenced by various archaeological cases (Morrison 2002, Possehl 2002; Murty 1994, 1992; Possehl and Kennedy 1979) as well as suggested by various historical texts, the earliest of which describe relationships during the Early Historic period in the Southern India. The Tamil Sangam corpus, for example, contains references to communities of hunters that, while integrated into Tamilakam society, retained an identity separate from agriculturalists and pastoralists (Murty 1994; Subrahmanian 1988). The Ashokan Edicts also mention various unconquered groups in Eastern and Central India who "maintained a livelihood from animals of the forest" (Thapar 1997: 118). While there are no such historical documentation of forager communities during the preceding Iron Age, some authors have argued that exchange between these groups and agriculturalist communities were an important component of subsistence in South Asian prehistory. As such, wild fauna may have been procured by foragers and reached agro-pastoral settlements through exchange interactions (Selvakumar 2000: 129; Murty 1992, 1985). However, Miracle (2005) also notes that it is

unclear whether these hunting assemblages were created by forager groups or served as hunting blinds for Neolithic herders themselves; thus, the caves could have been used by the herders, as part of hunting expeditions. If so, the overall low incidences of wild taxa at Neolithic ashmound and habitation sites indicates that the fruits of these expeditions were not transported back to the settlements, but prepared and consumed at the cave sites.

Although it remains unclear who created the cave assemblages, Iron Age faunal data evidence a slight shift in the incorporation of wild taxa into the daily diet. Perhaps such a shift is concurrent with a predilection to procure and consume wild taxa within the boundaries of settlements themselves, rather than at distinctive locales (such as the Kurnool sites). Although wild taxa are present at Southern Neolithic sites, they constitute only slightly more than 10% of the total identifiable specimens, suggesting that wild animals were rarely transported to and consumed at Neolithic sites[66]. Thus, Iron Age faunal assemblages may evidence a shifting sense of discrimination between hunted and domestic fauna, with an increasing incorporation of wild fauna into the daily diet.

With such a shift, hunting/foraging activities began to focus on the procurement of small, non-mammalian taxa. In fact, there appears to be an increase in the diversity of animals found at Iron Age sites throughout peninsular India, particularly in the representation of animals such as birds, turtles and fishes (A. Bauer et al. in review; R. Bauer et al. 2004; Thomas 1993, 1992a). While it is possible that Iron Age populations in

[66] As mentioned in Chapter 4, the actual proportion of non-mammalian taxa in these assemblages is likely to be underrepresented because of hand-collection recovery methods. In addition, some analysts have chosen to measure the abundance of these animals in terms of presence or absence, while some have recorded raw counts. However, the species distribution created by such practices is paralleled in Neolithic deposits at VMS 110, where all deposits were screened and specimens counted. Only further research can shed light on the contribution of wild taxa to Neolithic subsistence.

peninsular India continued to engage in various levels of interaction and exchange with nearby hunter/foragers, the faunal assemblage from Kadebakele contains little direct evidence in support of this contention. The remains of large-bodied wild mammals, such as gaur, panther, sambar and nilgai could represent portions of animals procured by foragers and exchanged with Kadebakele residents; however, these species are relatively rare, and each of these animals is only represented by a handful of axial and limb elements. In addition, there is no clear indication of these animal portions being treated in a distinctive manner, as these specimens have been recovered from mixed fill levels in four of the five excavation areas on the upper terrace.

The trade with forager groups that may have been important in previous times may have become less so with the intensification of rice production coupled with a year-round dairying economy during the Iron Age. With the increasing labor demands and specialization required for intensive cultivation and keeping of domestic herds, the exchange of wild game with forager groups may have supplied a need. However, the low frequency of the remains of such game suggests that these exchanges took place infrequently. However, farmers and pastoralists could easily supplement the resource of dairy and/or meat from domestic stock through the hunting of local non-mammals.

The majority of wild taxa identified within the Kadebakele assemblage represent local, non-mammalian species, which could have been procured in the site's environs. These data indicate that residents were able to procure turtles, birds and fish while concurrently engaged in pastoral (and agricultural) production. If the Neolithic pattern of faunal distribution evidenced trade with forager groups, then it is possible that Iron Age

populations became more inclined to procure these local animals for themselves. While groups of hunters were likely to continue to subsist on forest animals during the Iron Age, agro-pastoralists at Kadebakele appear to be shifting their energies to the maintenance of domestic herds, and perhaps the cultivation of agricultural lands as well (A. Bauer et al. in review; Morrison in press; Fuller 2003; Kajale 1991). However, meat remained an important component of the diet, and non-mammalian taxa were readily available and could be easily procured for these purposes. As birds, fish and turtles became incorporated into the daily diet, a range of individuals could have participated in the procurement, preparation and consumption of this meat. In contrast, the spatial isolation of the cave sites likely bespeaks restricted participation in these activities.

If the Neolithic cave sites were sporadically occupied by agro-pastoralists themselves, then wild animals would have become a slightly more important component of daily subsistence during the Iron Age. However, such changes are not evidenced by profound shifts between periods; during the Iron Age, wild fauna still constitutes less than 20% of the total identifiable specimens among peninsula Indian sites. At Kadebakele, however, wild taxa represent over 50% of the total specimens identified to taxonomic category. Interestingly, wild fauna use appears to decrease following the Iron Age, as the remains of these animals only represent 10% of identifiable specimens among Early Historic sites.

The increased predilection to procure non-mammalian fauna for everyday use might have emerged from the concern of retaining human and animal labor for agricultural production in the Iron Age. Perhaps with increasing political centralization in

the Early Historic Period, the production of domestic stock became a specialized task; the apparent decrease in wild animal use during this period may reflect provisioning from centralized distribution, and the consumption of wild animals was imbued with some negative connotation and fell out of favor. In addition, it is significant to note that the importance of domestic cattle during the Iron Age is not directly linked with the demands of agriculture, as Neolithic economies were also apparently heavily dependant on cattle (most likely for meat as well as secondary products) despite also being involved in some level of agricultural production (Fuller 2001; Fuller et al. 2001; Paddayya et al. 1995; Paddayya 1993, 1991/92; Murty 1992: 335; Allchin and Allchin 1982; Allchin 1963). I submit that the social role of cattle became imbued with different symbolic and ritual meanings in the Iron Age, as the pastoral economy of the Neolithic became increasingly interwoven with agricultural production. At the end the Neolithic, the creation of monumental ashmounds in the Southern Deccan apparently ceased (Johansen 2004; Sinopoli et al. 2002), and roles of cattle into social life concurrently changed.

Feasting

The faunal assemblage at Kadebakele suggests that cattle were consumed during the Iron Age, but not within a daily subsistence context. Data show that non-domestic accumulations, such as the megaliths in Block A and the Southern Slope include the highest proportion of cow bones. In fact, these animals were often reared for secondary products, as demonstrated by the presence of many aged individuals as well as intermediately-sized castrates. The apparent importance of cattle in both subsistence and ritual contexts strongly suggests that these animals were considered valuable, in many

regards, and likely denoted both wealth and status to their owner(s). Thus, the slaughter and communal consumption of one (or many) of these creature both highlighted the sacrifice of the owner, as well as created a social context for community members to participate in ritual activities of megalith construction.

The ethnohistoric and archaeological record has provided interesting insight into feasts as social institutions and cultural practices. Often times, feasting events are public areas through which competing nodes of authority are expressed and intertwined with the politics of conspicuous consumption (Mills 2004; Dietler and Hayden 2001; Junker 2001; Kelly 2001; Jackson and Scott 1995). These concerns certainly were relevant to Iron Age feasting events as well, perhaps in a manner analogous to the patrons of Middle and Vijayanagara period temples in the region documented in inscriptions (Devaraj and Patil [eds.] 1991a, 1991b; Gopal 1985). As such, these slaughter/consumption events might have been regarded as attempts for cattle owners to pay ritual tribute in the creation of this megalith. However, unlike the later period temples, there is no direct evidence for the owners' identities or the avenues through which patrons of these Iron Age feasts were to be recognized. While providing the animal(s) suitable for communal consumption may bestow distinction on a group or individual, feasting activities also require provisioning of meat for large groups numbers of people. These events may have emphasized dimensions of group identity, perhaps with regard to shared recognition of the value placed on cattle in general and the meaningfulness of the megalithic structure to be created in the community. Although it is impossible to determine what axes of distinction

were associated with these feasts, it is also possible that such events were restricted by age, gender or kinship affiliation.

The symbolic value of cattle and importance of pastoralism in the Neolithic economy have been suggested as a possible explanation for the creation of large ashmound features during this period, suggesting that both cattle and dung were considered ritually and economically valuable (Johansen 2004; Sinopoli et al. 2002). After the Neolithic, the ritual importance of these animals did not diminish, although the practices through which symbolic meaning was expressed appears to have changed during the Iron Age. With the increasing importance of agricultural production and the increasing labor requirements therein, it is possible that cattle dung became incorporated into the processes of field cultivation and was no longer considered a viable resource to use for monument creation. Instead, the arrangement of rocks into megalithic structures gained popularity, and the ritual significance of cattle was expressed through feasting events which marked phases of constructing these features. The contention that animal dung became used in different social contexts could be evaluated through various archaeological datasets, including micromorphological and/or phosphate analyses (results from investigations at Kadebakele are forthcoming).

While scholars have documented a wide variety of megalithic contents throughout the subcontinent (ranging from human to horse burials, and incorporating a complex sequence of construction layers) (Mohanty and Selvakumar 2002), it is possible that incorporating cattle into rituals of megalith construction is most relevant to the Southern Deccan region, where the shift from ashmound to megalith construction would have

taken place (see Figure 4.1). Indeed, cattle (specifically zebu) are still regarded with reverence in the later Vedic texts, and the rituals associated with cows and bulls are similarly sacrificial and consumption-based (Jha 2002). Additional research and well-controlled excavations at Neolithic and Early Historic sites in the region will help address dimensions of animal use in various regions of Southern India, both contemporaneously as well as over time.

10.4 Animals and Social Distinctions

The interrelationships between animals and human populations are complex and dynamic; animals are involved in human life in myriad ways: as food sources, status symbols, and companions, for example. Although zooarchaeological data often reveals the dietary contribution of fauna, animals incorporated into human subsistence regimes must be considered more than simply economic resources. Furthermore, modes of subsistence are not mutually exclusive, nor can they be simply mapped onto social organization. Indeed, I have argued that the interpenetrating realms of procurement and consumption at Kadebakele are inexorably tied to axes of social distinctions, which are components of specific socio-historic contexts. Below, I consider evidence connecting subsistence practices with axes of difference between Iron Age inhabitants of Kadebakele, and suggest various avenues for further research.

Reevaluating the Links between Subsistence and Society

This dissertation employed archaeological faunal data to investigate anthropological issues of social stratification and subsistence economy in an effort to

broaden the scope through which faunal remains have been used to understand the past. I sought to address and expand upon ways in which previous research has characterized the relationships between humans and animals, particularly with regard to modes of subsistence and axes of distinction linked to these practices. By exploring the archaeological record of one Iron Age site in Southern India, I have explored consumption and husbandry practices, and considered aspects of social distinctions related to these activities. Here, I will discuss the implications of my findings with regard to the ways in which animals were invoked in creating, maintaining or erasing axes of social differentiation during the South Indian Iron Age.

Ethnographers and archaeologists have already decoupled an erroneous link between food acquisition methods and social structure or complexity (e.g., Szuter 1994; Kent 1989). That is to say, societies undertake various subsistence strategies in specific socio-historical contexts; my dissertation research has challenged the false notion that a pastoral economy precludes hunting activities, and emphasized the important contribution of wild fauna to the quotidian Iron Age diet. Furthermore, the reliance on non-mammalian taxa (such as birds, turtles and fish) during this time may bespeak important changes in subsistence organization from preceding periods, perhaps as a means of managing the requirements of a more labor-intensive agricultural regime.

Concurrent with the diversification of agriculture in the Iron Age, smaller, wild fauna became increasingly incorporated into daily subsistence regimes; as such, it is likely that previously existing restrictions upon who could procure and consume hunted taxa dissolved. However, large, wild fauna may have continued to possess symbolic

importance, as evidenced by an (probably Iron Age) rock art panel located in a cave above the Block A area (see figure 10.1). This panel clearly portrays both water buffalo and deer surrounding a large group of human figures. It is possible that the capture of large game continued to be considered prestigious, although the remains of these animals were quite rare in the assemblage. The rockshelters in the Kurnool District continued to be occupied sporadically for the procurement and consumption of wild animals during the Iron Age. The capture of smaller mammals and non-mammalian taxa, was unlikely to hold similar prestige and was undertaken in the environs of the site itself; perhaps these animals were considered a communal resource with no potential for accumulative value, or their capture was not restricted and did not convey status for the hunter. As these smaller taxa gained importance in the daily diet, the tradition of consuming wild animal meats in unique locales, as evidenced in the Neolithic, became less prominent.

With a shift in the social meanings of wild game, and increasing demand for dung for use in agricultural fields rather than ashmound monuments, axes of difference and community identity became expressed in different ways during the Iron Age. At Kadebakele we observe that cattle are preferentially incorporated into ritual deposits and consumed at feasts, which may have concurrently conveyed status to the owner(s) of the animal and emphasized group identity through the tasks of megalith creation and communal consumption. Further, the concurrent emphasis on agricultural and pastoral production at Kadebakele suggests that a division of labor was required to maintain both agricultural and pastoral production. Although it remains unclear exactly what value was denoted to these tasks, it is likely that such undertakings were differentially valued, both

in relation to one another as well as among the individuals who participated in these subsistence practices. That is to say, different groups of people were needed to cultivate and herd, and it remains to be explored to what extent these activities were differentially valued and socially separated.

Directions for Future Research

My research has attempted to remedy the paucity of existing faunal data on the Iron Age in South India; it is significant insofar as it is the first detailed study of animal use in the South Indian Iron Age. Ideally, my analysis has demonstrated the analytical power of careful excavation and sampling strategies, and will serve to inspire similar studies in the near future. While shedding light on practices of herding, hunting and the symbolic dimension of cattle, my analysis necessarily raises more questions than it is able to answer.

First and foremost, the lack of a regional picture of the South Indian Iron Age precludes an understanding of the relationship between Kadebakele and other sites in the area. How are the Kadebakele residents different or similar to inhabitants of other sites in the region? Is the emphasis on wild taxa for small-scale subsistence representative of other communities? Or, is the Kadebakele assemblage indicative of some specialized activities taking place uniquely at this site? Is there evidence for trade with foraging groups at other sites in the Tungabhadra Valley? Do other sites demonstrate similar domestic age/sex profiles and emphasis on secondary products production? Additional research will certainly corroborate or refute the interpretations I have presented herein.

My discussion of the Kadebakele assemblage has relied on a broad, and somewhat dichotomous, conceptualization of "wild" fauna, which I have differentiated as large mammals (i.e., sambar, chital, panther) versus non-mammals (i.e., birds, turtles, fish) and small mammals (i.e., mongooses, shrews, rabbits). In many cases, this distinction was appropriate, as various skills, dangers and difficulties are involved in procuring larger, wild game that are less relevant to the capture of smaller mammalian and non-mammalian taxa. In addition, large game are relatively rare within the Kadebakele assemblage, while non-mammals and small mammals are more frequently represented; in addition, there was no observed contextual differences in terms of how these animals were disposed of. Although I am hopeful that my investigations of animal use during the Iron Age have illustrated the contribution of taxa that were previously unexpected components of susbsistence regimes, my work would certainly have benefited from regional and ethnozoological perspectives. As the capture and consumption of smaller, wild animals was likely a commonplace activity at Kadebakele, reflecting the exploitation of an array of ecological niches, further work could be directed towards understanding the meanings of these animals as members of the Iron Age world. As research in the region progresses, future scholarship could begin to unpack these assemblages in order to explore socially meaningful categories associated with the hunting or use of such creatures (such as seasonality of capture, medicinal use, craft production, control of resources, restrictions on capture/consumption, etc.).

In addition, the importance of cattle to the residents of Kadebakele has been demonstrated through various lines of zooarchaeological evidence. However, the extent

to which Iron Age people differentiated between zebu and water buffalo remains to be fully explored due to the inadequacies of differentiating between these two species osteologically. Despite various metrics gathered from archaeological and modern specimens (Appendices III, IV, and V), my efforts proved unable to address this issue, which remains unresolved. Further research on this matter could also investigate subsistence and consumption practices in later times with regard to shifting uses for these two animals. For example, zebus became explicitly discussed in Vedic texts, while water buffalo do not. The ritual use of water buffalo is documented in ethnohistoric texts (Hiltebeitel 1985), but the role of this domesticate in early South Asia is virtually unknown, particularly with regard to its skill in cultivating rice paddies. Do later religious proscriptions appear to influence the consumption of these two animals? Are these animals considered differently from one another as appropriate sources of labor in later periods? By gaining a regional perspective on use of cattle during the Iron Age, the mode of "pastoralism" could be more precisely defined for this area (i.e., Khazanov 1994; Rissman 1989; Spooner 1973; Dyson-Hudson 1972), and its implications further explored. For example, where are herds brought to graze, when, and by whom? What types of relationships existed between pastoralists and agricultural producers in the Tungabhadra Valley? How is the stream of pastoral products likely to have interdigitated with small- and large-scale consumption during this time?

Similarly, the central role of cattle in feasting associated with megalith construction at Kadebakele stimulates interesting questions about these enigmatic structures. First, it is unlikely that such practices are limited to this single megalith, and it

would be interesting to investigate other megaliths that contain evidence for feasting. Furthermore, the class of artifacts associated with the interment and feast remains have yet to be analyzed. The material culture associated with feasting is clearly a significant component of the event itself (e.g., Dietler 1996), and it would be interesting to observe the similarities and differences between artifacts within the megalithic strata and those recovered in the domestic midden, as well as in comparison to other sites in the region.

Considering the contributions of my research in a holistic socio-historic context highlights the intersections between subsistence and political economy that have yet to be explored in detail (also A. Bauer et al. in review); as such, a wide variety of questions relating to subsistence regimes have yet to be addressed. If rice agriculture was an important component of Iron Age economies, demanding a stable base of skilled labor and influencing herd management strategies, why and how did this shift occur? The preferential use of cattle for ritual feasting indicates that these animals were imbued with social value; what dimensions of status and power were created/negotiation through feasting, and towards what end was this power used? How might these aspects of differentiation intersect with the ownership/control of agricultural fields or water resources? Further research in the Tungabhadra Valley and beyond are needed to begin to consider these lines of enquiry, and integrate our current understanding into a broader and more holistic understanding of human-animal relationships during the South Indian prehistory.

10.5 Concluding Remarks

In order to move beyond the limitations of faunal analyses composed of species lists, and estimates of biomass and diversity, I have argued that animals must be theorized as integral and dynamic aspects of human social life. In this sense, animals must be conceptualized as vital components of social and cultural life: animal husbandry, hunting strategies, slaughtering and carcass preparation all require specific types of local knowledge. As food, sources of labor, or beings imbued with symbolic significance, human societies invoke animals in order to negotiate, maintain, or erase various axes of social differences. My research at Kadebakele sought to broaden the analytical scope through which social distinctions are addressed, to show that animals in human societies are dynamic and integral vehicles of difference, similarities and social interactions. Thus, dimensions of identity and practice intersect at the interface between human and animal populations.

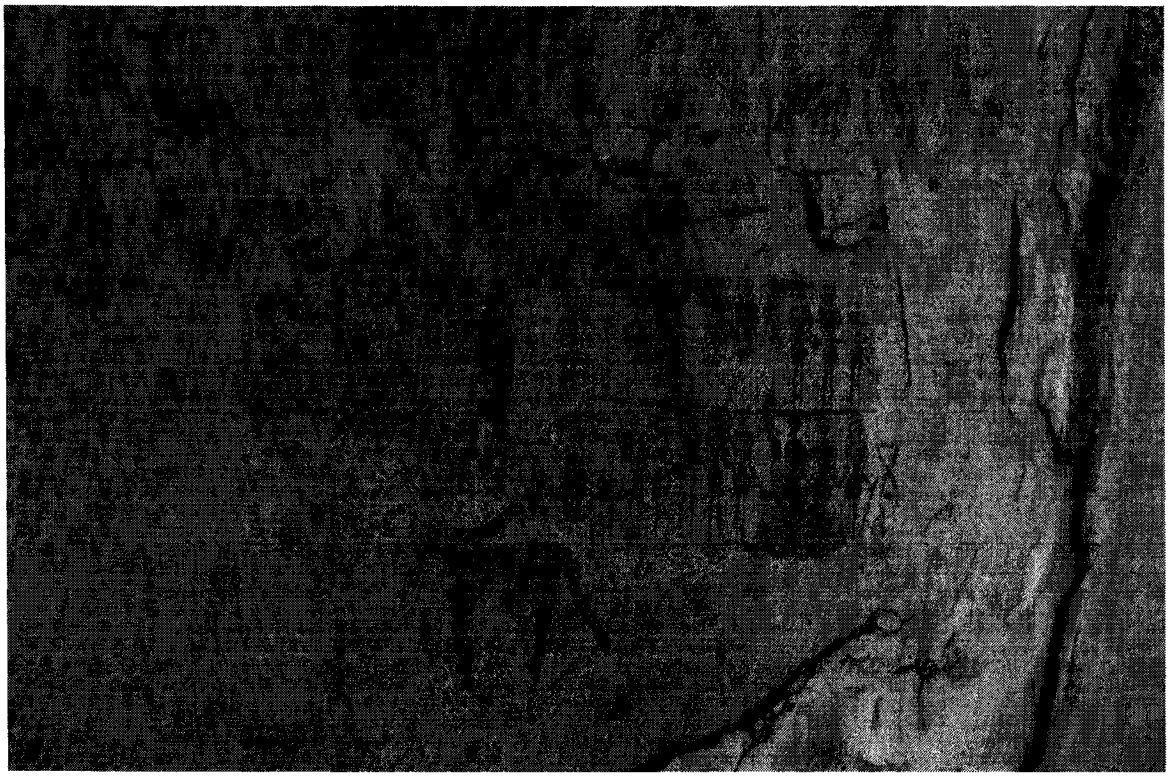


Figure 10.1 – Rock art above Kadebakele Upper Terrace depicting water buffalo (lower left) and large deer (upper right) with two lines of individuals holding hands. Although this panel cannot be absolutely dated, it is likely to date to the Iron Age or Early Historic Period.

Appendix I – Wild fauna of the Tungabhadra Valley

Wild Mammals

Order	Common Name	Taxonomic Name
LARGE MAMMALS	(over 60 kg)	
Artiodactyla	Sambar	*Cervus unicolor*
Artiodactyla	Swamp Deer	*Cervus duvaucelii*
Artiodactyla	Nilgai	*Bosephalus tragocamelus*
Artiodactyla	Gaur	*Bos gaurus*
Carnivora	Sloth bear	*Melursus ursinus*
Carnivora	Tiger	*Panthera tigris*
MEDIUM MAMMALS	(10–60 kg)	
Primates	Rhesus macaque	*Macaca mulatta*
Primates	Hanuman langur	*Semnopithecus entellus*
Artiodactyla	Mouse deer	*Moschiola meminna*
Artiodactyla	Chital	*Axis axis*
Artiodactyla	Indian muntjac	*Munitacus muntjak*
Artiodactyla	Blackbuck	*Antilope cervicapra*
Artiodactyla	Four-horned antelope	*Tetracerus quadricornis*
Artiodactyla	Indian Gazelle	*Gazella bennitti*
Artiodactyla	Wild pig	*Sus scrofa*
Carnivora	Jackal	*Canis aureus*
Carnivora	Wolf	*Canis lupus*
Carnivora	Wild Dog	*Cuon alpinus*
Carnivora	Hyena	*Hyaena hyaena*
Carnivora	Fox	*Vulpes* sp.
Carnivora	Leopard	*Panthera pardus*
Rodentia	Indian Porcupine	*Hystrix indica*
SMALL MAMMALS	(under 10 kg)	
Carnivora	Rusty Spotted cat	*Prionailurus rubiginosus*
Carnivora	Jungle cat	*Felis chaus*
Carnivora	Honey Badger	*Mellivora capensis*
Carnivora	Smooth-coated Otter	*Lutrogale perspicillata*
Carnivora	Marten	*Martes* sp.
Carnivora	Small Indian civet	*Viverricula indica*
Carnivora	Common Palm civet	*Paradoxurus hermaphroditus*
Carnivora	Mongoose	*Herpestes* sp.
Pholidota	Pangolin	*Manis crassicaudata*
Lagomorpha	Indian Hare	*Lepus nigricollis*
Insectivora	Shrew	*Suncus* sp.
Rodentia	Squirrel	*Funambulus* sp
Rodentia	Indian Giant Flying	*Petaurista philippensis*

	squirrel	
Rodentia	Rat	*Rattus sp.*
Rodentia	Bandicoot	*Bandicota sp.*
Rodentia	Mouse	*Mus* and *Anathana* sp.
Chiroptera	Indian Flying Fox	*Pteropus giganteus*

Wild Birds

Order	**Common Name**	**Taxonomic Name**
GAME BIRDS		
Galliformes	Partridge	*Francolinus* sp.
Galliformes	Jungle Bush Quail	*Perdicula asiatica*
Galliformes	Spurfowl	*Galloperdix* sp.
Galliformes	Grey Junglefowl	*Gallus sonneratii*
Galliformes	Buttonquail	*Turnix* sp.
Galliformes	Indian Peafowl (peacock)	*Pavo cristatus*
WATERFOWL		
Anseriformes	Lesser Whistling Duck	*Dendrocygna javanica*
Anseriformes	Bar-headed Goose	*Anser indicus*
Anseriformes	Cotton Pygmy-goose	*Nettapus coromandelianus*
Anseriformes	Duck	*Anas* sp.
Ciconiiformes	Little Grebe	*Tachybaptus ruficollis*
Ciconiiformes	Darter	*Anhinga melanogaster*
Ciconiiformes	Cormorant	*Phalacrocorax* sp.
Ciconiiformes	Egret	*Egretta and Casmerodius* sp.
Ciconiiformes	Heron	*Ardea, Ardeola, Butorides and Nycticorax* sp.
Ciconiiformes	Ibis	*Threskiornis and Pseudibis* sp.
Ciconiiformes	Stork	*Mycteria and Ciconia* sp.
Ciconiiformes	Asian Openbill	*Anastomis oscitans*
WADERS		
Gruiformes	White-Breasted Waterhen	*Amaurornis phoenicurus*
Gruiformes	Purple Swamphen	*Porphyrio porphyrio*
Gruiformes	Moorhen	*Gallinula chloropus*
Gruiformes	Coot	*Fulica atra*
Ciconiiformes	Common Snipe	*Gallinago gallinago*
Ciconiiformes	Sandpiper	*Actitis and Tringa* sp.
Ciconiiformes	Jacana	*Hydrophasianus and Metopidius* sp.
Ciconiiformes	Thick-Knee	*Burhinus oedicnemus*
Ciconiiformes	Black-winged Stilt	*Himantopus himantopus*

Ciconiiformes	Little Ringed Plover	*Charadrius dubius*
Ciconiiformes	Lapwing	*Vanellus* sp.
Ciconiiformes	Tern	*Sterna and Chlidonias* sp.
BIRDS OF PREY		
Strigiformes	Owl	*Otus, Tyto and Bubo* sp.
Ciconiiformes	Oriental Honey-Buzzard	*Pernis ptilorhyncus*
Ciconiiformes	Kite	*Elanus, Haliastur and Milvus* sp.
Ciconiiformes	Vulture	*Neophron, Sarcogyps and Gyps* sp.
Ciconiiformes	Eagle	*Aquila, Circaetus and Spilornis* sp.
Ciconiiformes	Harrier	*Circus* sp.
Ciconiiformes	Shikra	*Accipital badius*
Ciconiiformes	White-eyed Buzzard	*Butastur teesa*
	Falcon	*Falco* sp.
OTHER BIRDS		
Coraciiformes	Kingfisher	*Halcyon, Alcedo and Ceryle* sp.
Coraciiformes	Roller	*Coracias* sp.
Coraciiformes	Bee-eater	*Merops* sp.
Cuculiformes	Cuckoo	*Phaenicophaeus, Clamator, Hierococcyx, and Cacomantis* sp.
Cuculiformes	Koel	*Eudynamys* sp.
Upupiformes	Hoopoe	*Upupa epops*
Psittaciformes	Parakeet	*Psittacula* sp.
Strigiformes	Nightjar	*Caprimulgus* sp.
Columbiformes	Dove	*Streptopelia* sp.
Columbiformes	Pigeon	*Chalcophaps and Treron* sp.
Ciconiiformes	Sandgrouse	*Pterocles* sp.
Piciformes	Woodpecker	*Dendrocopos* sp.
Piciformes	Barbet	*Megalaima* sp.
Apodiformes	Swift	*Cypsiurus and Apus* sp.

Wild Reptiles and Amphibians

Order	**Common Name**	**Taxonomic Name**
TURTLE/TORTOISES		
Testudines	Indian Black Turtle	*Melanochelys trijuga*
Testudines	Indian Tent Terrapin	*Kachuga tentoria*
Testudines	Indian Mud Turtle	*Lissemys punctata*
Testudines	Deccan Softshell Turtle	*Aspideretes leithii*

Testudines	Starred Tortoise	*Geochelone elegans*
LIZARDS		
Squamata	Gecko	*Hemidactylus* sp.
Squamata	Garden Lizard	*Calotes versicolor*
Squamata	Fan-Throated Lizard	*Sitana ponticeriana*
Squamata	Agama	*Laudakia and Psammophilus* sp.
Squamata	Indian Chameleon	*Chamaeleon zeylanicus*
Squamata	Skink	*Mabuya and Lygosoma* sp.
Squamata	Snake-eye	*Ophisops* sp.
Squamata	Monitor lizard	*Varanus* sp.
SNAKES		
Squamata	Blind Snake	*Ramphotyphlops* sp.
Squamata	Russell's Earth Boa	*Eryx conicus*
Squamata	Indian Python	*Python molurus*
Squamata	Trinket Snake	*Elaphe Helena*
Squamata	Ratsnake	*Pytas and Argyrogena* sp.
Squamata	Common Kukri Snake	*Oligodon arnensis*
Squamata	Tree Snake	*Dendrelaphis tristis*
Squamata	Wolf Snake	*Lycodon* sp.
Squamata	Keelback	*Xenochrophis, Atretium and Macropisthodon* sp.
Squamata	Indian Gamma	*Boiga trigonata*
Squamata	Green Whip Snake	*Ahaetulla nasuta*
Squamata	Indian Krait	*Bungarus caeruleus*
Squamata	Indian Cobra	*Naja naja*
Squamata	Russell's Viper	*Daboia russelii*
Squamata	Saw Scaled Viper	*Echis carinata*
Squamata	Green Pit Viper	*Trimeresurus gramineus*
Squamata	Hump-Nosed Pit Viper	*Hypnale hypnale*
AMPHIBIANS		
Gymnophiona	Beddome's Ichthyophis	*Ichthyophis beddomii*
Salientia	Malabar Torrent Toad	*Ansonia ornata*
Salientia	Indian Toad	*Bufo* sp.
Salientia	Painted Kaloula	*Kaloula taprobanica*
Salientia	Microhylid	*Microhyla* sp.
Salientia	Jerdon's Ramanella	*Ramanella montana*
Salientia	Balloon Frog	*Uperodon* sp.
Salientia	Konkan Bush Frog	*Philautus bombayensis*
Salientia	Common Tree Frog	*Polypedates maculatus*
Salientia	Skittering Frog	*Rana cyanophlyctis*
Salientia	Indian Pond Frog	*Rana hexadactylus*

Salientia	Indian Burrowing Frog	*Rana breviceps*
Salientia	Bullfrog	*Rana* sp.

Fishes

Order	Common Name	Taxonomic Name
Anguilliformes	Indian Long-Fin Eel	*Anguilla bengalensis*
Cypriniformes	Reba Carp	*Cirrhinus reba*
Cypriniformes	Kolus	*Gonoproktopterus kolus*
Cypriniformes	Black Rohu	*Labeo calbasu*
Cypriniformes	Barb/Carp	*Puntius* sp.
Cypriniformes	Mahseer	*Tor khudree*
Cypriniformes	Blackline Rasbora	*Parluciosoma daniconius*
Cypriniformes	Malabar Loach	*Lepidocephalus thermalis*
Siluriformes	Giant River Catfish	*Aorichthys seenghala*
Siluriformes	Catfish	*Mystus* sp.
Siluriformes	Rita	*Rita rita*
Siluriformes	Indian Butter-Catfish	*Ompok bimaculatus*
Siluriformes	Wallago	*Wallago attu*
Siluriformes	Pungas	*Pangasius pangasius*
Siluriformes	Stinging Catfish	*Heteropneustes fossilis*
Perciformes	Indian Glassy Fish	*Pseudambassis ranga*
Perciformes	Mottled Nandus	*Nandus nandus*
Perciformes	Orange Chromide	*Etroplus maculates*
Perciformes	Goby	*Glossogobius giurus*
Perciformes	Climbing Perch	*Anabas testudineus*
Perciformes	Indian Paradise Fish	*Macropodus cupanus*
Perciformes	Snakehead	*Channa* sp.
Synbranchiformes	Tire-Track Spiny Eel	*Mastacembelus armatus*

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-203NL2	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	3rd Phalanx	left	1	3/4	15
-21.6E-203NL2	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2nd phalanx	right	1	comple	15
-21.6E-203NL2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	intermediate carpal		1	comple	7
-21.6E-203NL2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	carpal		1	1/2	10
-21.6E-203NL2	lm						Distal	indeterminate	scapula		1	1/2	24
-21.6E-203NL2	Mammalia	Artiodactyla				M artiodactyl	Proxim	fused	metatarsal		1	1/2	3
-21.6E-203NL2	lm						Distal	indeterminate	phalanx		1	1/4	2
-21.6E-203NL2	lm/mm							indeterminate	scapula		1	<1/4	7
-21.6E-203NL2	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	fused	2nd phalanx		1	1/2	0
-21.6E-203NL2	Mammalia	Rodentia				cf. Vole		fused	mandible	left	1	1/2	0
-21.6E-203NL2	lm							fused	sesamoid		1	comple	1
-21.6E-203NL2	lm							fused	costal cartilage		1	fragme	0
-21.6E-203NL2	Aves					bird		indeterminate	long bone		1	fragme	0
-21.6E-203NL2	lm							unfused	long bone		1	fragme	14
-21.6E-203NL2	Mammalia								tooth		26	fragme	19
-21.6E-203NL2	Aves/Reptilia					bird/reptile		indeterminate	skull		1	fragme	0
-21.6E-203NL2	lm							unfused	vert		1	fragme	3
-21.6E-203NL2	lm							indeterminate	vert		5	fragme	14
-21.6E-203NL2	lm							indeterminate	skull		5	fragme	13
-21.6E-203NL2	lm							indeterminate	long bone		63	fragme	163
-21.6E-203NL2	lm							indeterminate	rib/spine		14	fragme	21
-21.6E-203NL2	lm							indeterminate	indeterminate		31	fragme	60
-21.6E-203NL2	mm							indeterminate	long bone		99	fragme	40
-21.6E-203NL2	mm							indeterminate	rib/spine		39	fragme	11
-21.6E-203NL2	mm							indeterminate	indeterminate		39	fragme	21
-21.6E-203NL2	unident							indeterminate	indeterminate			fragme	95
-21.6E-203NL4	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	1st phalanx	left	1	comple	27
-21.6E-203NL4	mm							fused	intermediate carpal		1	comple	1
-21.6E-203NL4	lm							fused	sesamoid		1	comple	2
-21.6E-203NL4	lm/mm							fused	scapula		3	fragme	12
-21.6E-203NL4	Reptilia	Sauria				lizard		fused	vert		1	comple	0
-21.6E-203NL4	Osteichthyes					fish		fused	vert		1	comple	0
-21.6E-203NL4	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	0
-21.6E-203NL4	Aves					bird		fused	long bone		3	fragme	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-203NL2	zebu	3rd Phalanx	DLS 63.82, MBS 21.02
-21.6E-203NL2	zebu	2nd phalanx	GL 41.68, Bp 28.06, Bd 24.64
-21.6E-203NL2	zebu/buffalo	intermediate carpal	
-21.6E-203NL2	zebu/buffalo	carpal	
-21.6E-203NL2		scapula	
-21.6E-203NL2	M artiodactyl	metatarsal	
-21.6E-203NL2		phalanx	b=1
-21.6E-203NL2		scapula	
-21.6E-203NL2	sheep/goat/de	2nd phalanx	Bd 8.97
-21.6E-203NL2	cf. Vole	mandible	
-21.6E-203NL2		sesamoid	
-21.6E-203NL2		costal cartilag	dev=old adult, calcified, arthritic?
-21.6E-203NL2	bird	long bone	
-21.6E-203NL2		long bone	
-21.6E-203NL2		tooth	b=1
-21.6E-203NL2	bird/reptile	skull	
-21.6E-203NL2		vert	
-21.6E-203NL2		vert	
-21.6E-203NL2		skull	pc=1
-21.6E-203NL2		long bone	b=4, pc=8
-21.6E-203NL2		rib/spine	pc=1
-21.6E-203NL2		indeterminate	b=2, pc=6
-21.6E-203NL2		long bone	b=7, pc=8, c=4
-21.6E-203NL2		rib/spine	b=3, pc=4, c=2
-21.6E-203NL2		indeterminate	b=4, pc=3
-21.6E-203NL2		indeterminate	
-21.6E-203NL4	zebu	1st phalanx	GLPe 65.27 Bp 27.41 Bd 27.42
-21.6E-203NL4		intermediate carpal	
-21.6E-203NL4		sesamoid	
-21.6E-203NL4		scapula	
-21.6E-203NL4	lizard	vert	
-21.6E-203NL4	fish	vert	diam = 12.27
-21.6E-203NL4	softshell turtle	carapace	
-21.6E-203NL4	bird	long bone	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-203NL4	Osteichthyes					fish		fused	spine		1	fragme	0
-21.6E-203NL4	sm/Reptilia					sm/reptile		indeterminate	indeterminate		1	fragme	0
-21.6E-203NL4	Mammalia								tooth		31	fragme	19
-21.6E-203NL4	lm							indeterminate	vert		3	fragme	16
-21.6E-203NL4	lm							indeterminate	skull		7	fragme	16
-21.6E-203NL4	lm							indeterminate	long bone		20	fragme	49
-21.6E-203NL4	lm							indeterminate	rib/spine		12	fragme	19
-21.6E-203NL4	lm							indeterminate	indeterminate		10	fragme	29
-21.6E-203NL4	mm							indeterminate	long bone		85	fragme	44
-21.6E-203NL4	mm							indeterminate	rib/spine		28	fragme	15
-21.6E-203NL4	mm							indeterminate	skull		9	fragme	6
-21.6E-203NL4	mm							indeterminate	indeterminate		28	fragme	15
-21.6E-203NL4	Aves					bird		indeterminate	skull		4	fragme	2
-21.6E-203NL4	unident							indeterminate	indeterminate			fragme	89
-21.6E-203NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		indeterminate	astragalus		1	3/4	14
-21.6E-203NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		indeterminate	innominate		1	1/4	11
-21.6E-203NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		indeterminate	scapula		1	1/4	9
-21.6E-203NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		unfused	long bone		1	1/4	7
-21.6E-203NL5	lm/mm							indeterminate	rib		3	fragme	2
-21.6E-203NL5	unident							indeterminate	indeterminate			fragme	10
-21.6E-203NL5	lm						Distal	fused	phalanx		1	1/4	3
-21.6E-203NL5	Mammalia	Carnivora	Canidae	Canis		canis sp.	Distal	fused	metapodial		1	1/4	0
-21.6E-203NL5	lm							unfused	maxilla		1	fragme	13
-21.6E-203NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Lateral Malleolus		1	comple	7
-21.6E-203NL5	Mammalia	Artiodactyla	Bovidae			bovid		fused	carpal 4		1	comple	3
-21.6E-203NL5	Mammalia	Artiodactyla				L ruminant	Proxim	fused	metacarpal		1	1/4	25
-21.6E-203NL5	lm						Distal	indeterminate	long bone		1	<1/4	13
-21.6E-203NL5	lm						Proxim	fused	humerus		1	<1/4	26
-21.6E-203NL5	mm							fused	costal cartilage		2	fragme	1
-21.6E-203NL5	Mammalia								antler		3	fragme	5
-21.6E-203NL5	lm							unerupted	incisor		1	1/2	0
-21.6E-203NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			incisor		1	3/4	3
-21.6E-203NL5	Mammalia	Rodentia							incisor		1	fragme	0
-21.6E-203NL5	lm								incisor		1	3/4	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-203NL4	fish	spine	
-21.6E-203NL4	sm/reptile	indeterminate	
-21.6E-203NL4		tooth	
-21.6E-203NL4		vert	
-21.6E-203NL4		skull	
-21.6E-203NL4		long bone	b=2
-21.6E-203NL4		rib/spine	
-21.6E-203NL4		indeterminate	
-21.6E-203NL4		long bone	b=7, c=1
-21.6E-203NL4		rib/spine	b=6, c=1
-21.6E-203NL4		skull	
-21.6E-203NL4		indeterminate	b=1
-21.6E-203NL4	bird	skull	
-21.6E-203NL4		indeterminate	
-21.6E-203NL5	zebu/buffalo	astragalus	dev=fetal/newborn, D1 23.7 (eroded)
-21.6E-203NL5	zebu/buffalo	innominate	dev=fetal/newborn
-21.6E-203NL5	zebu/buffalo	scapula	dev=fetal/newborn
-21.6E-203NL5	zebu/buffalo	long bone	dev=fetal/newborn
-21.6E-203NL5		rib	dev=fetal/newborn
-21.6E-203NL5		indeterminate	dev=fetal/newborn
-21.6E-203NL5		phalanx	dev=fetal/newborn, b=1
-21.6E-203NL5	canis sp.	metapodial	Bd 8.61
-21.6E-203NL5		maxilla	dev=fetal/newborn
-21.6E-203NL5	zebu/buffalo	Lateral Malleolus	
-21.6E-203NL5	bovid	carpal 4	
-21.6E-203NL5	L ruminant	metacarpal	
-21.6E-203NL5		long bone	
-21.6E-203NL5		humerus	
-21.6E-203NL5		costal cartilage	
-21.6E-203NL5		antler	
-21.6E-203NL5		incisor	
-21.6E-203NL5	zebu/buffalo	incisor	dev=adult
-21.6E-203NL5		incisor	
-21.6E-203NL5		incisor	dev=old adult

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-203NL5	sm							fused	innominate		1	3/4	0
-21.6E-203NL5	Reptilia	Squamata				snake		fused	vert		1	1/2	1
-21.6E-203NL5	sm						Distal	fused	humerus		1	1/2	0
-21.6E-203NL5	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		7	fragme	4
-21.6E-203NL5	Aves					bird		indeterminate	long bone		4	fragme	2
-21.6E-203NL5	Osteichthyes					L fish		fused	vert		1	comple	0
-21.6E-203NL5	mm							indeterminate	vert		3	fragme	3
-21.6E-203NL5	Mammalia								tooth		12	fragme	7
-21.6E-203NL5	lm							indeterminate	long bone		48	fragme	104
-21.6E-203NL5	lm							indeterminate	rib/spine		13	fragme	15
-21.6E-203NL5	lm							indeterminate	skull		21	fragme	57
-21.6E-203NL5	lm							indeterminate	indeterminate		52	fragme	77
-21.6E-203NL5	mm							indeterminate	long bone		40	fragme	24
-21.6E-203NL5	mm							indeterminate	rib/spine		43	fragme	19
-21.6E-203NL5	mm							indeterminate	indeterminate		9	fragme	9
-21.6E-203NL5	unident							indeterminate	indeterminate			fragme	216
-21.6E-203NL6	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		3	fragme	23
-21.6E-203NL6	lm							fused	acetabulum		1	3/4	11
-21.6E-203NL6	Mammalia	Artiodactyla	Bovidae			L bovid		fused	intermediate carpal		1	comple	7
-21.6E-203NL6	Mammalia	Artiodactyla	Bovidae			L bovid		fused	carpal 4		1	comple	3
-21.6E-203NL6	lm							fused	sesamoid		2	3/4	2
-21.6E-203NL6	mm							fused	costal cartilage		2	fragme	5
-21.6E-203NL6	mm						Distal	fused	phalanx		1	1/2	0
-21.6E-203NL6	Mammalia	Artiodactyla	Suidae	Sus		pig	Distal	fused	5th metatarsus		1	1/4	1
-21.6E-203NL6	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	centrur	unfused	vert, cervical		1	1/4	3
-21.6E-203NL6	lm						epiphy	unfused	vert		2	1/2	0
-21.6E-203NL6	unident							indeterminate	indeterminate			fragme	3
-21.6E-203NL6	mm							fused	petris temporal		1	fragme	0
-21.6E-203NL6	Mammalia								tooth		6	fragme	2
-21.6E-203NL6	Reptilia	Testudines				S turtle		fused	vert		1	3/4	0
-21.6E-203NL6	Reptilia	Squamata				snake		fused	vert		1	1/2	0
-21.6E-203NL6	Aves					bird		indeterminate	long bone		8	fragme	4
-21.6E-203NL6	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		22	fragme	4
-21.6E-203NL6	lm							indeterminate	long bone		67	fragme	126

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-203NL5		innominate	
-21.6E-203NL5	snake	vert	
-21.6E-203NL5		humerus	
-21.6E-203NL5	bird/reptile	indeterminate	
-21.6E-203NL5	bird	long bone	pc=1
-21.6E-203NL5	L fish	vert	
-21.6E-203NL5		vert	pc=1
-21.6E-203NL5		tooth	b=1
-21.6E-203NL5		long bone	pc=5, c=2
-21.6E-203NL5		rib/spine	b=2
-21.6E-203NL5		skull	pc=2, hack=1
-21.6E-203NL5		indeterminate	b=2
-21.6E-203NL5		long bone	b=3, c=1
-21.6E-203NL5		rib/spine	b=8, c=1
-21.6E-203NL5		indeterminate	c=1
-21.6E-203NL5		indeterminate	
-21.6E-203NL6	softshell turtle	carapace	
-21.6E-203NL6		acetabulum	
-21.6E-203NL6	L bovid	intermediate carpal	
-21.6E-203NL6	L bovid	carpal 4	
-21.6E-203NL6		sesamoid	
-21.6E-203NL6		costal cartilage	
-21.6E-203NL6		phalanx	
-21.6E-203NL6	pig	5th metatarsus	
-21.6E-203NL6	zebu/buffalo	vert, cervical	dev=fetal/newborn
-21.6E-203NL6		vert	dev=fetal/newborn
-21.6E-203NL6		indeterminate	dev=fetal/newborn
-21.6E-203NL6		petris temporal	
-21.6E-203NL6		tooth	
-21.6E-203NL6	S turtle	vert	
-21.6E-203NL6	snake	vert	
-21.6E-203NL6	bird	long bone	b=1, pc=1
-21.6E-203NL6	bird/reptile	indeterminate	
-21.6E-203NL6		long bone	b=4, pc=4, sf=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-203NL6	lm							indeterminate	rib/spine		15	fragme	44
-21.6E-203NL6	lm							indeterminate	skull		21	fragme	40
-21.6E-203NL6	lm							indeterminate	indeterminate		22	fragme	66
-21.6E-203NL6	lm/mm							indeterminate	indeterminate		59	fragme	47
-21.6E-203NL6	mm							indeterminate	long bone		67	fragme	33
-21.6E-203NL6	mm							indeterminate	rib/spine		54	fragme	23
-21.6E-203NL6	unident							indeterminate	indeterminate			fragme	180
-21.6E-203NL6	lm							indeterminate	skull		2	fragme	7
-21.6E-203NL6	Mammalia								tooth		1	fragme	0
-21.6E-203NL6	Mammalia								antler		1	fragme	0
-21.6E-203NL6	Osteichthyes					fish		indeterminate	vert		2	comple	2
-21.6E-203NL6	lm							indeterminate	long bone		4	fragme	4
-21.6E-203NL6	mm							indeterminate	long bone		21	fragme	5
-21.6E-203NL6	mm							indeterminate	rib/spine		8	fragme	2
-21.6E-203NL6	mm							indeterminate	skull		7	fragme	1
-21.6E-203NL6	mm							indeterminate	indeterminate		16	fragme	4
-21.6E-203NL6	unident							indeterminate	indeterminate			fragme	7
-21.6E-203NL7	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar	upper	1	comple	19
-21.6E-203NL8	Osteichthyes					fish		indeterminate	cleithrum		1	fragme	0
-21.6E-203NL8	Osteichthyes					fish		indeterminate	skull		3	fragme	1
-21.6E-203NL8	Osteichthyes					fish		indeterminate	vert		1	comple	1
-21.6E-203NL8	Reptilia	Sauria				lizard		fused	vert		1	fragme	0
-21.6E-203NL8	mm						Proxim	unfused	phalanx		1	fragme	1
-21.6E-203NL8	Mammalia								antler		1	fragme	0
-21.6E-203NL8	Mammalia								tooth		7	fragme	1
-21.6E-203NL8	lm/mm							indeterminate	vert		1	fragme	0
-21.6E-203NL8	lm							indeterminate	long bone		9	fragme	14
-21.6E-203NL8	lm							indeterminate	rib/spine		4	fragme	14
-21.6E-203NL8	lm							indeterminate	rib		1	fragme	2
-21.6E-203NL8	lm							indeterminate	indeterminate		11	fragme	17
-21.6E-203NL8	mm							indeterminate	long bone		20	fragme	9
-21.6E-203NL8	mm							indeterminate	rib/spine		14	fragme	3
-21.6E-203NL8	mm							indeterminate	indeterminate		7	fragme	3
-21.6E-203NL8	unident							indeterminate	indeterminate			fragme	15

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-203NL6		rib/spine	b=1
-21.6E-203NL6		skull	
-21.6E-203NL6		indeterminate	b=1
-21.6E-203NL6		indeterminate	b=2, pc=3
-21.6E-203NL6		long bone	b=5, c=3
-21.6E-203NL6		rib/spine	b=7, pc=2
-21.6E-203NL6		indeterminate	
-21.6E-203NL6		skull	
-21.6E-203NL6		tooth	
-21.6E-203NL6		antler	
-21.6E-203NL6	fish	vert	diam = 4.62
-21.6E-203NL6		long bone	
-21.6E-203NL6		long bone	
-21.6E-203NL6		rib/spine	
-21.6E-203NL6		skull	
-21.6E-203NL6		indeterminate	b=1
-21.6E-203NL6		indeterminate	
-21.6E-203NL7	zebu/buffalo	molar	dev=adult
-21.6E-203NL8	fish	cleithrum	
-21.6E-203NL8	fish	skull	
-21.6E-203NL8	fish	vert	diam = 14.07
-21.6E-203NL8	lizard	vert	
-21.6E-203NL8		phalanx	
-21.6E-203NL8		antler	
-21.6E-203NL8		tooth	
-21.6E-203NL8		vert	
-21.6E-203NL8		long bone	
-21.6E-203NL8		rib/spine	
-21.6E-203NL8		rib	
-21.6E-203NL8		indeterminate	
-21.6E-203NL8		long bone	b=5
-21.6E-203NL8		rib/spine	c=2
-21.6E-203NL8		indeterminate	
-21.6E-203NL8		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL0	Mammalia								tooth		12	fragme	8
-21.6E-204NL0	lm							indeterminate	long bone		21	fragme	20
-21.6E-204NL0	lm							indeterminate	indeterminate		4	fragme	20
-21.6E-204NL0	mm							indeterminate	long bone		33	fragme	10
-21.6E-204NL0	mm							indeterminate	rib/spine		5	fragme	0
-21.6E-204NL0	mm							indeterminate	indeterminate		2	fragme	1
-21.6E-204NL0	unident							indeterminate	indeterminate			fragme	4
-21.6E-204NL1	unident							indeterminate	indeterminate			fragme	116
-21.6E-204NL1	Mammalia	Rodentia	Hystricidae	Hystrix	indica	Indian porcupine		fused	metapodial		1	3/4	0
-21.6E-204NL1	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		fused	3rd Phalanx	left	1	1/2	1
-21.6E-204NL1	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	2nd phalanx	right	1	comple	1
-21.6E-204NL1	mm						Proxim	unfused	phalanx		1	comple	1
-21.6E-204NL1	lm							indeterminate	astragalus		1	1/2	2
-21.6E-204NL1	Reptilia	Testudines				turtle		fused	vert		2	comple	0
-21.6E-204NL1	Reptilia	Testudines				turtle		fused	carapace		1	fragme	0
-21.6E-204NL1	Aves					bird		indeterminate	long bone		1	fragme	1
-21.6E-204NL1	lm							indeterminate	costal cartilage		1	fragme	4
-21.6E-204NL1	lm						Distal	indeterminate	phalanx		1	<1/4	0
-21.6E-204NL1	lm						Distal	indeterminate	scapula		1	<1/4	18
-21.6E-204NL1	lm						Distal	indeterminate	humerus		1	<1/4	29
-21.6E-204NL1	lm							indeterminate	mandible		2	1/4	19
-21.6E-204NL1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	radial carpal	right	1	comple	7
-21.6E-204NL1	mm							indeterminate	carpal/tarsal		1	fragme	0
-21.6E-204NL1	lm							fused	petris temporal		1	fragme	0
-21.6E-204NL1	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		1	fragme	0
-21.6E-204NL1	Mammalia								tooth		32	fragme	16
-21.6E-204NL1	lm							indeterminate	vert		10	fragme	66
-21.6E-204NL1	lm/mm							unfused	vert		1	fragme	1
-21.6E-204NL1	lm/mm							indeterminate	vert		3	fragme	2
-21.6E-204NL1	lm							indeterminate	skull		11	fragme	14
-21.6E-204NL1	lm							indeterminate	long bone		58	fragme	112
-21.6E-204NL1	lm							indeterminate	rib/spine		17	fragme	23
-21.6E-204NL1	lm							indeterminate	indeterminate		49	fragme	73
-21.6E-204NL1	mm							indeterminate	long bone		244	fragme	93
-21.6E-204NL1	mm							indeterminate	rib/spine		59	fragme	20

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL0		tooth	
-21.6E-204NL0		long bone	
-21.6E-204NL0		indeterminate	b=2, c=18
-21.6E-204NL0		long bone	b=1, c=28
-21.6E-204NL0		rib/spine	c=4
-21.6E-204NL0		indeterminate	c=1
-21.6E-204NL0		indeterminate	
-21.6E-204NL1		indeterminate	
-21.6E-204NL1	Indian porcupi	metapodial	GL 26.87
-21.6E-204NL1	sheep/goat	3rd Phalanx	
-21.6E-204NL1	goat	2nd phalanx	GL 28.25, Bp 10.55, Bd 8.77
-21.6E-204NL1		phalanx	Bp 13.02
-21.6E-204NL1		astragalus	dev=fetal/newborn
-21.6E-204NL1	turtle	vert	
-21.6E-204NL1	turtle	carapace	
-21.6E-204NL1	bird	long bone	c=1
-21.6E-204NL1		costal cartilage	
-21.6E-204NL1		phalanx	
-21.6E-204NL1		scapula	b=1
-21.6E-204NL1		humerus	
-21.6E-204NL1		mandible	
-21.6E-204NL1	zebu/buffalo	radial carpal	
-21.6E-204NL1		carpal/tarsal	b=1
-21.6E-204NL1		petris temporal	
-21.6E-204NL1	bird/reptile	indeterminate	
-21.6E-204NL1		tooth	
-21.6E-204NL1		vert	pc=1
-21.6E-204NL1		vert	
-21.6E-204NL1		vert	
-21.6E-204NL1		skull	b=1
-21.6E-204NL1		long bone	b=6, pc=7, c=4
-21.6E-204NL1		rib/spine	b=6
-21.6E-204NL1		indeterminate	b=5, c=2
-21.6E-204NL1		long bone	b=25, pc=7, c=1
-21.6E-204NL1		rib/spine	b=6, pc=6, c=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL1	mm							indeterminate	indeterminate		90	fragme	42
-21.6E-204NL1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			premolar	right	1	comple	5
-21.6E-204NL1	Mammalia								tooth		3	fragme	2
-21.6E-204NL1	sm							indeterminate	vert, thoracic		3	fragme	2
-21.6E-204NL1	lm							unfused	vert		1	fragme	2
-21.6E-204NL1	lm							indeterminate	vert		3	fragme	8
-21.6E-204NL1	lm							indeterminate	long bone		22	fragme	40
-21.6E-204NL1	lm							indeterminate	rib/spine		1	fragme	1
-21.6E-204NL1	lm							indeterminate	indeterminate		10	fragme	8
-21.6E-204NL1	mm							indeterminate	long bone		92	fragme	28
-21.6E-204NL1	mm							indeterminate	rib/spine		5	fragme	2
-21.6E-204NL1	mm							indeterminate	indeterminate		9	fragme	3
-21.6E-204NL1	unident							indeterminate	indeterminate			fragme	27
-21.6E-204NL1	lm							indeterminate	long bone		9	fragme	4
-21.6E-204NL1	mm							indeterminate	long bone		15	fragme	3
-21.6E-204NL2	Aves					bird		indeterminate	long bone		1	fragme	1
-21.6E-204NL2	Mammalia	Artiodactyla	Bovidae			bovid		fused	accessory carpal		1	comple	2
-21.6E-204NL2	mm							indeterminate	vert		2	fragme	7
-21.6E-204NL2	Mammalia								tooth		8	fragme	1
-21.6E-204NL2	lm							indeterminate	long bone		20	fragme	40
-21.6E-204NL2	lm							indeterminate	rib/spine		2	fragme	3
-21.6E-204NL2	lm							indeterminate	indeterminate		9	fragme	17
-21.6E-204NL2	mm							indeterminate	long bone		65	fragme	22
-21.6E-204NL2	mm							indeterminate	rib/spine		9	fragme	4
-21.6E-204NL2	mm							indeterminate	indeterminate		43	fragme	17
-21.6E-204NL2	sm/bird					sm/bird		indeterminate	indeterminate		4	fragme	2
-21.6E-204NL2	Mammalia	Rodentia				rat/mouse		indeterminate	long bone		3	fragme	1
-21.6E-204NL2	unident							indeterminate	indeterminate			fragme	26
-21.6E-204NL2	Mammalia	Artiodactyla	Bovidae	Antilope	cervicapra	blackbuck		fused	astragalus	right	1	comple	7
-21.6E-204NL2	mm							fused	calcaneus		1	1/2	9
-21.6E-204NL2	Mammalia								antler		3	fragme	2
-21.6E-204NL2	mm						Distal	indeterminate	phalanx		1	1/4	1
-21.6E-204NL2	Mammalia	Artiodactyla				M artiodactyl	Distal	fused	metapodial		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL1		indeterminate	b=9. pc=2, c=3
-21.6E-204NL1	zebu	premolar	dev=adult, slightly worn
-21.6E-204NL1		tooth	
-21.6E-204NL1		vert, thoracic	
-21.6E-204NL1		vert	
-21.6E-204NL1		vert	
-21.6E-204NL1		long bone	pc=1
-21.6E-204NL1		rib/spine	
-21.6E-204NL1		indeterminate	b=1, c=1
-21.6E-204NL1		long bone	b=7, c=10
-21.6E-204NL1		rib/spine	
-21.6E-204NL1		indeterminate	
-21.6E-204NL1		indeterminate	
-21.6E-204NL1		long bone	c=2
-21.6E-204NL1		long bone	c=5
-21.6E-204NL2	bird	long bone	
-21.6E-204NL2	bovid	accessory carpal	
-21.6E-204NL2		vert	
-21.6E-204NL2		tooth	
-21.6E-204NL2		long bone	b=2
-21.6E-204NL2		rib/spine	b=1
-21.6E-204NL2		indeterminate	b=1
-21.6E-204NL2		long bone	b=12, pc=6
-21.6E-204NL2		rib/spine	
-21.6E-204NL2		indeterminate	c=2
-21.6E-204NL2	sm/bird	indeterminate	
-21.6E-204NL2	rat/mouse	long bone	
-21.6E-204NL2		indeterminate	
-21.6E-204NL2	blackbuck	astragalus	GL1 30.24 GLm 28.58 D1 16.78 Bd 18.02
-21.6E-204NL2		calcaneus	
-21.6E-204NL2		antler	
-21.6E-204NL2		phalanx	
-21.6E-204NL2	M artiodactyl	metapodial	w=1, thinned shaft

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-204NL2	Mammalia	Artiodactyla	Suidae	Sus		pig	Proxim	fused	metatarsal		1	1/4	7
-21.6E-204NL2	lm							fused	sesamoid		1	comple	0
-21.6E-204NL2	Mammalia								tooth		9	fragme	4
-21.6E-204NL2	mm						Distal	fused	metapodial		1	<1/4	1
-21.6E-204NL2	lm							indeterminate	vert		5	fragme	16
-21.6E-204NL2	lm/mm							indeterminate	vert		2	fragme	2
-21.6E-204NL2	lm/mm							unfused	vert		2	fragme	1
-21.6E-204NL2	lm							indeterminate	skull		2	fragme	4
-21.6E-204NL2	Aves					bird		indeterminate	long bone		1	fragme	2
-21.6E-204NL2	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		2	fragme	1
-21.6E-204NL2	lm							indeterminate	long bone		53	fragme	99
-21.6E-204NL2	lm							indeterminate	rib/spine		11	fragme	13
-21.6E-204NL2	lm							indeterminate	indeterminate		12	fragme	17
-21.6E-204NL2	mm							indeterminate	long bone		168	fragme	64
-21.6E-204NL2	mm							indeterminate	rib/spine		31	fragme	10
-21.6E-204NL2	mm							indeterminate	indeterminate		40	fragme	27
-21.6E-204NL2	mm							indeterminate	skull		7	fragme	7
-21.6E-204NL2	unident							indeterminate	indeterminate			fragme	102
-21.6E-204NL2	lm							indeterminate	indeterminate		3	fragme	1
-21.6E-204NL3	lm						Proxim	unfused	calcaneus		1	1/4	44
-21.6E-204NL3	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	fused	1st phalanx	right	1	1/4	9
-21.6E-204NL3	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	fused	1st phalanx	left	1	1/4	9
-21.6E-204NL3	lm							indeterminate	long bone		1	<1/4	20
-21.6E-204NL3	Mammalia	Artiodactyla				L artiodactyl		fused	metapodial		6	fragme	26
-21.6E-204NL3	mm						Proxim	unfused	calcaneus		1	<1/4	5
-21.6E-204NL3	mm						Distal	unfused	metapodial		1	1/2	0
-21.6E-204NL3	mm						Proxim	unfused	femur		1	comple	0
-21.6E-204NL3	mm							indeterminate	carpal/tarsal		2	fragme	1
-21.6E-204NL3	lm						centrur	fused	vert		1	1/4	10
-21.6E-204NL3	lm/mm							fused	carpal/tarsal		1	1/4	4
-21.6E-204NL3	mm/sm							indeterminate	vert		7	fragme	8
-21.6E-204NL3	lm							fused	petris temporal		1	fragme	16
-21.6E-204NL3	mm							fused	petris temporal		1	fragme	0
-21.6E-204NL3	Mammalia								antler		4	fragme	5

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL2	pig	metatarsal	
-21.6E-204NL2		sesamoid	dev=fetal/newborn
-21.6E-204NL2		tooth	
-21.6E-204NL2		metapodial	
-21.6E-204NL2		vert	
-21.6E-204NL2		vert	
-21.6E-204NL2		vert	
-21.6E-204NL2		skull	
-21.6E-204NL2	bird	long bone	
-21.6E-204NL2	bird/reptile	indeterminate	
-21.6E-204NL2		long bone	b=3, c=2
-21.6E-204NL2		rib/spine	b=1
-21.6E-204NL2		indeterminate	b=2
-21.6E-204NL2		long bone	b=9, c=11
-21.6E-204NL2		rib/spine	b=3, c=5
-21.6E-204NL2		indeterminate	b=2, c=2
-21.6E-204NL2		skull	
-21.6E-204NL2		indeterminate	
-21.6E-204NL2		indeterminate	c=1
-21.6E-204NL3		calcaneus	
-21.6E-204NL3	zebu	1st phalanx	Bp 27.78
-21.6E-204NL3	zebu	1st phalanx	Bp 28.79
-21.6E-204NL3		long bone	pc=1
-21.6E-204NL3	L artiodactyl	metapodial	
-21.6E-204NL3		calcaneus	
-21.6E-204NL3		metapodial	
-21.6E-204NL3		femur	
-21.6E-204NL3		carpal/tarsal	dev=fetal/newborn
-21.6E-204NL3		vert	
-21.6E-204NL3		carpal/tarsal	
-21.6E-204NL3		vert	b=2
-21.6E-204NL3		petris temporal	
-21.6E-204NL3		petris temporal	
-21.6E-204NL3		antler	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
-21.6E-204NL3	mm							fused	costal cartilage		2	fragme	0
-21.6E-204NL3	Mammalia								tooth		30	fragme	28
-21.6E-204NL3	Mammalia	Artiodactyla	Suidae	Sus		pig		unerupted	M3	lower	1	1/2	4
-21.6E-204NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			incisor		1	comple	2
-21.6E-204NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar	upper	1	3/4	22
-21.6E-204NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar		1	1/4	8
-21.6E-204NL3	Osteichthyes					fish		fused	vert		1	fragme	0
-21.6E-204NL3	Amphibia	Anura				frog/toad		fused	dentary		1	1/2	0
-21.6E-204NL3	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	plastron		1	fragme	0
-21.6E-204NL3	sm/bird					sm/bird		indeterminate	skull		7	fragme	3
-21.6E-204NL3	lm							indeterminate	long bone		46	fragme	88
-21.6E-204NL3	lm							indeterminate	rib/spine		18	fragme	37
-21.6E-204NL3	lm							indeterminate	skull		26	fragme	58
-21.6E-204NL3	lm/mm							indeterminate	indeterminate		52	fragme	81
-21.6E-204NL3	mm							indeterminate	long bone		117	fragme	72
-21.6E-204NL3	mm							indeterminate	rib/spine		55	fragme	26
-21.6E-204NL3	unident							indeterminate	indeterminate			fragme	258
-21.6E-204NL3	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		2	fragme	2
-21.6E-204NL3	Osteichthyes					fish		indeterminate	skull		2	fragme	0
-21.6E-204NL3	Mammalia	Rodentia	Hystricidae	Hystrix	indica	Indian porcupine		fused	metacarpal		1	3/4	1
-21.6E-204NL3	Aves	Galliformes	Phasianidae	Gallus		junglefowl		fused	4th phalanx		1	comple	0
-21.6E-204NL3	Osteichthyes					fish		indeterminate	dentary		1	1/4	0
-21.6E-204NL3	Osteichthyes					fish		fused	vert		2	comple	0
-21.6E-204NL3	Reptilia	Sauria	Varanidae	Varanus		monitor lizard		fused	mandible	right	1	comple	0
-21.6E-204NL3	Mammalia	Rodentia				rat/mouse		fused	maxilla		1	comple	0
-21.6E-204NL3	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	pectoral spine		1	1/2	0
-21.6E-204NL3	Osteichthyes					fish		indeterminate	indeterminate		1	fragme	1
-21.6E-204NL3	Aves					bird		indeterminate	long bone		2	fragme	1
-21.6E-204NL3	sm						Proxim	indeterminate	femur		1	1/4	0
-21.6E-204NL3	lm/mm							indeterminate	long bone		1	fragme	1
-21.6E-204NL3	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		2	fragme	0
-21.6E-204NL3	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	2
-21.6E-204NL3	mm							fused	accessory carpal		1	comple	1
-21.6E-204NL3	Mammalia								antler		3	fragme	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL3		costal cartilage	
-21.6E-204NL3		tooth	b=2
-21.6E-204NL3	pig	M3	
-21.6E-204NL3	zebu/buffalo	incisor	dev=adult
-21.6E-204NL3	zebu/buffalo	molar	dev=adult
-21.6E-204NL3	zebu/buffalo	molar	
-21.6E-204NL3	fish	vert	
-21.6E-204NL3	frog/toad	dentary	
-21.6E-204NL3	softshell turtle	plastron	
-21.6E-204NL3	sm/bird	skull	b=1
-21.6E-204NL3		long bone	pc=3, c=1
-21.6E-204NL3		rib/spine	
-21.6E-204NL3		skull	b=1
-21.6E-204NL3		indeterminate	b=2, pc=4
-21.6E-204NL3		long bone	b=5, pc=4, c=2
-21.6E-204NL3		rib/spine	b=5, pc=2, c=4
-21.6E-204NL3		indeterminate	
-21.6E-204NL3	softshell turtle	carapace	
-21.6E-204NL3	fish	skull	
-21.6E-204NL3	Indian porcupi	metacarpal	GL 28.06, Bd 8.37
-21.6E-204NL3	junglefowl	4th phalanx	GL 15.34
-21.6E-204NL3	fish	dentary	
-21.6E-204NL3	fish	vert	diam = 8.3
-21.6E-204NL3	monitor lizard	mandible	
-21.6E-204NL3	rat/mouse	maxilla	
-21.6E-204NL3	catfish	pectoral spine	
-21.6E-204NL3	fish	indeterminate	
-21.6E-204NL3	bird	long bone	
-21.6E-204NL3		femur	
-21.6E-204NL3		long bone	w=1
-21.6E-204NL3	bird/reptile	indeterminate	
-21.6E-204NL3	L artiodactyl	metapodial	c=1
-21.6E-204NL3		accessory carpal	
-21.6E-204NL3		antler	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL3	Mammalia								tooth		17	fragme	9
-21.6E-204NL3	lm							fused	petris temporal		1	fragme	2
-21.6E-204NL3	lm							fused	costal cartilage		1	fragme	1
-21.6E-204NL3	mm							fused	costal cartilage		1	fragme	0
-21.6E-204NL3	lm							indeterminate	vert		5	fragme	14
-21.6E-204NL3	lm/mm							indeterminate	vert		1	fragme	1
-21.6E-204NL3	lm							indeterminate	carpal/tarsal		1	1/4	5
-21.6E-204NL3	lm							indeterminate	ilium		1	<1/4	12
-21.6E-204NL3	lm							indeterminate	skull		13	fragme	24
-21.6E-204NL3	lm/mm							indeterminate	skull		8	fragme	4
-21.6E-204NL3	lm							indeterminate	mandible		2	fragme	13
-21.6E-204NL3	lm							indeterminate	long bone		67	fragme	144
-21.6E-204NL3	lm							indeterminate	rib/spine		17	fragme	18
-21.6E-204NL3	lm							indeterminate	indeterminate		31	fragme	36
-21.6E-204NL3	mm							indeterminate	long bone		161	fragme	57
-21.6E-204NL3	mm							indeterminate	long bone		1	fragme	1
-21.6E-204NL3	mm							indeterminate	rib/spine		13	fragme	4
-21.6E-204NL3	mm							indeterminate	indeterminate		58	fragme	25
-21.6E-204NL3	unident							indeterminate	indeterminate			fragme	97
-21.6E-204NL3	lm							indeterminate	long bone		1	fragme	2
-21.6E-204NL3	lm							indeterminate	long bone		2	fragme	2
-21.6E-204NL3	lm							indeterminate	rib/spine		1	fragme	1
-21.6E-204NL3	lm							indeterminate	indeterminate		3	fragme	1
-21.6E-204NL3	unident							indeterminate	indeterminate			fragme	1
-21.6E-204NL4	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	5
-21.6E-204NL4	lm							unfused	vert, thoracic		1	<1/4	19
-21.6E-204NL4	lm						centrur	indeterminate	vert		1	<1/4	8
-21.6E-204NL4	lm/mm						epiphy	unfused	vert		4	fragme	5
-21.6E-204NL4	mm/sm						epiphy	unfused	vert		2	fragme	0
-21.6E-204NL4	lm/mm							indeterminate	vert		2	fragme	0
-21.6E-204NL4	lm/mm							fused	carpal/tarsal		2	fragme	1
-21.6E-204NL4	mm							fused	petris temporal		1	fragme	1
-21.6E-204NL4	Mammalia								antler		4	fragme	2
-21.6E-204NL4	mm							fused	costal cartilage		1	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL3		tooth	
-21.6E-204NL3		petris temporal	
-21.6E-204NL3		costal cartilage	
-21.6E-204NL3		costal cartilage	
-21.6E-204NL3		vert	
-21.6E-204NL3		vert	
-21.6E-204NL3		carpal/tarsal	
-21.6E-204NL3		ilium	rg=1
-21.6E-204NL3		skull	
-21.6E-204NL3		skull	pc=1
-21.6E-204NL3		mandible	
-21.6E-204NL3		long bone	b=5
-21.6E-204NL3		rib/spine	b=1
-21.6E-204NL3		indeterminate	b=3
-21.6E-204NL3		long bone	b=3, pc=2
-21.6E-204NL3		long bone	w=1
-21.6E-204NL3		rib/spine	pc=1
-21.6E-204NL3		indeterminate	b=3
-21.6E-204NL3		indeterminate	
-21.6E-204NL3		long bone	pc=1, w=1
-21.6E-204NL3		long bone	pc=1
-21.6E-204NL3		rib/spine	
-21.6E-204NL3		indeterminate	
-21.6E-204NL3		indeterminate	
-21.6E-204NL4	softshell turtle	carapace	
-21.6E-204NL4		vert, thoracic	
-21.6E-204NL4		vert	
-21.6E-204NL4		vert	b=1
-21.6E-204NL4		vert	
-21.6E-204NL4		vert	
-21.6E-204NL4		carpal/tarsal	
-21.6E-204NL4		petris temporal	
-21.6E-204NL4		antler	
-21.6E-204NL4		costal cartilage	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL4	Mammalia	Carnivora	Canidae	Canis		canis sp.		fused	2nd phalanx		1	comple	0
-21.6E-204NL4	Reptilia	Squamata				snake		fused	vert		1	comple	0
-21.6E-204NL4	Amphibia	Anura				frog/toad		fused	ilium		1	comple	0
-21.6E-204NL4	Reptilia	Testudines				turtle		fused	scapula		1	comple	0
-21.6E-204NL4	sm/bird							indeterminate	skull		12	fragme	5
-21.6E-204NL4	Reptilia					reptile		indeterminate	indeterminate		2	fragme	0
-21.6E-204NL4	Aves					bird		indeterminate	long bone		5	fragme	6
-21.6E-204NL4	mm							indeterminate	rib		3	fragme	0
-21.6E-204NL4	mm							indeterminate	long bone		1	fragme	0
-21.6E-204NL4	mm						epiphy:	unfused	long bone		1	fragme	0
-21.6E-204NL4	Mammalia								tooth		10	fragme	1
-21.6E-204NL4	lm							indeterminate	long bone		19	fragme	36
-21.6E-204NL4	lm							indeterminate	rib/spine		8	fragme	11
-21.6E-204NL4	lm							indeterminate	skull		12	fragme	13
-21.6E-204NL4	lm							indeterminate	indeterminate		36	fragme	34
-21.6E-204NL4	mm							indeterminate	long bone		54	fragme	25
-21.6E-204NL4	mm							indeterminate	rib/spine		42	fragme	19
-21.6E-204NL4	unident							indeterminate	indeterminate			fragme	115
-21.6E-204NL4	lm							indeterminate	long bone		3	fragme	2
-21.6E-204NL4	lm							indeterminate	rib/spine		1	fragme	2
-21.6E-204NL4	mm							indeterminate	long bone		3	fragme	0
-21.6E-204NL5	lm							indeterminate	skull		2	fragme	8
-21.6E-204NL5	mm						centrur	indeterminate	vert		1	<1/4	2
-21.6E-204NL5	Mammalia								tooth		28	fragme	16
-21.6E-204NL5	lm							indeterminate	long bone		5	fragme	6
-21.6E-204NL5	lm							indeterminate	rib/spine		1	fragme	2
-21.6E-204NL5	lm							indeterminate	indeterminate		9	fragme	10
-21.6E-204NL5	mm							indeterminate	long bone		38	fragme	13
-21.6E-204NL5	mm							indeterminate	rib/spine		5	fragme	3
-21.6E-204NL5	mm							indeterminate	skull		3	fragme	1
-21.6E-204NL5	mm							indeterminate	indeterminate		15	fragme	6
-21.6E-204NL5	Osteichthyes					fish		fused	vert		1	comple	0
-21.6E-204NL5	sm							indeterminate	long bone		1	1/2	0
-21.6E-204NL5	Osteichthyes					fish		fused	cleithrum		1	fragme	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL4	canis sp.	2nd phalanx	b=1, GL 14.08
-21.6E-204NL4	snake	vert	b=1
-21.6E-204NL4	frog/toad	ilium	
-21.6E-204NL4	turtle	scapula	
-21.6E-204NL4		skull	
-21.6E-204NL4	reptile	indeterminate	
-21.6E-204NL4	bird	long bone	b=1, sf=2
-21.6E-204NL4		rib	dev=fetal/newborn, b=1
-21.6E-204NL4		long bone	dev=fetal/newborn
-21.6E-204NL4		long bone	dev=fetal/newborn
-21.6E-204NL4		tooth	
-21.6E-204NL4		long bone	b=3
-21.6E-204NL4		rib/spine	
-21.6E-204NL4		skull	
-21.6E-204NL4		indeterminate	pc=5
-21.6E-204NL4		long bone	b=5
-21.6E-204NL4		rib/spine	b=3
-21.6E-204NL4		indeterminate	
-21.6E-204NL4		long bone	pc=3
-21.6E-204NL4		rib/spine	pc=1
-21.6E-204NL4		long bone	b=1
-21.6E-204NL5		skull	
-21.6E-204NL5		vert	
-21.6E-204NL5		tooth	
-21.6E-204NL5		long bone	pc=1
-21.6E-204NL5		rib/spine	
-21.6E-204NL5		indeterminate	
-21.6E-204NL5		long bone	b=3
-21.6E-204NL5		rib/spine	b=2
-21.6E-204NL5		skull	
-21.6E-204NL5		indeterminate	
-21.6E-204NL5	fish	vert	diam = 7
-21.6E-204NL5		long bone	
-21.6E-204NL5	fish	cleithrum	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL5	unident							indeterminate	indeterminate			fragme	19
-21.6E-204NL6	unident							indeterminate	indeterminate			fragme	233
-21.6E-204NL6	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	unfused	femur		1	comple	11
-21.6E-204NL6	lm/mm							indeterminate	innominate		2	fragme	8
-21.6E-204NL6	lm/mm							fused	phalanx		1	comple	0
-21.6E-204NL6	lm/mm						shaft	indeterminate	long bone		4	fragme	2
-21.6E-204NL6	lm/mm							indeterminate	indeterminate		20	fragme	14
-21.6E-204NL6	Aves	Galliformes	Phasianidae	Gallus		junglefowl		fused	1st phalanx		1	3/4	0
-21.6E-204NL6	Reptilia					reptile		fused	vert		1	3/4	0
-21.6E-204NL6	Aves					bird		indeterminate	long bone		10	fragme	5
-21.6E-204NL6	Osteichthyes					fish		fused	vert		6	fragme	1
-21.6E-204NL6	lm							fused	acetabulum		1	fragme	10
-21.6E-204NL6	lm							fused	petris temporal		1	fragme	26
-21.6E-204NL6	mm							fused	petris temporal		1	fragme	0
-21.6E-204NL6	Mammalia								antler		3	fragme	2
-21.6E-204NL6	Reptilia					reptile		indeterminate	indeterminate		5	fragme	0
-21.6E-204NL6	sm							fused	femur		1	3/4	0
-21.6E-204NL6	sm						Distal	fused	tibia		1	comple	0
-21.6E-204NL6	sm							fused	fibula		1	comple	0
-21.6E-204NL6	mm						shaft	fused	metapodial		1	<1/4	6
-21.6E-204NL6	lm/mm							unerupted	mandible		1	<1/4	0
-21.6E-204NL6	sm							fused	mandible		3	fragme	0
-21.6E-204NL6	Mammalia	Rodentia				rat/mouse		fused	mandible		1	fragme	0
-21.6E-204NL6	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		unerupted	molar		1	fragme	0
-21.6E-204NL6	Mammalia								tooth		6	fragme	7
-21.6E-204NL6	lm							fused	carpal/tarsal		2	fragme	8
-21.6E-204NL6	lm/mm							fused	costal cartilage		3	fragme	1
-21.6E-204NL6	lm							indeterminate	vert		1	1/4	27
-21.6E-204NL6	lm/mm							indeterminate	vert		5	<1/4	8
-21.6E-204NL6	lm							fused	innominate		2	<1/4	20
-21.6E-204NL6	lm							indeterminate	long bone		47	fragme	92
-21.6E-204NL6	lm							indeterminate	rib/spine		42	fragme	104
-21.6E-204NL6	lm							indeterminate	skull		20	fragme	38
-21.6E-204NL6	lm							indeterminate	indeterminate		24	fragme	41

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL5		indeterminate	
-21.6E-204NL6		indeterminate	
-21.6E-204NL6	sheep/goat/de	femur	dev=fetal/newborn, Bp 41.92
-21.6E-204NL6		innominate	dev=fetal/newborn
-21.6E-204NL6		phalanx	dev=fetal/newborn
-21.6E-204NL6		long bone	dev=fetal/newborn
-21.6E-204NL6		indeterminate	
-21.6E-204NL6	junglefowl	1st phalanx	
-21.6E-204NL6	reptile	vert	
-21.6E-204NL6	bird	long bone	
-21.6E-204NL6	fish	vert	
-21.6E-204NL6		acetabulum	
-21.6E-204NL6		petris temporal	
-21.6E-204NL6		petris temporal	
-21.6E-204NL6		antler	
-21.6E-204NL6	reptile	indeterminate	
-21.6E-204NL6		femur	
-21.6E-204NL6		tibia	
-21.6E-204NL6		fibula	
-21.6E-204NL6		metapodial	
-21.6E-204NL6		mandible	dev=fetal/newborn, with unerupted molar
-21.6E-204NL6		mandible	
-21.6E-204NL6	rat/mouse	mandible	
-21.6E-204NL6	sheep/goat/de	molar	
-21.6E-204NL6		tooth	
-21.6E-204NL6		carpal/tarsal	
-21.6E-204NL6		costal cartilage	
-21.6E-204NL6		vert	
-21.6E-204NL6		vert	
-21.6E-204NL6		innominate	
-21.6E-204NL6		long bone	b=8, c=3
-21.6E-204NL6		rib/spine	b=2
-21.6E-204NL6		skull	b=3, c=1
-21.6E-204NL6		indeterminate	b=6

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL6	mm							indeterminate	long bone		79	fragme	50
-21.6E-204NL6	mm							indeterminate	rib/spine		149	fragme	78
-21.6E-204NL6	mm							indeterminate	skull		43	fragme	24
-21.6E-204NL6	mm							indeterminate	indeterminate		11	fragme	6
-21.6E-204NL6	sm							indeterminate	long bone		2	fragme	0
-21.6E-204NL7	lm						Distal	fused	phalanx		1	<1/4	2
-21.6E-204NL7	lm						Proxim	fused	phalanx		1	<1/4	2
-21.6E-204NL7	mm							fused	vert, cervical		1	fragme	4
-21.6E-204NL7	Reptilia	Testudines				turtle		fused	plastron		1	fragme	0
-21.6E-204NL7	mm							fused	hyoid		1	fragme	0
-21.6E-204NL7	mm							fused	costal cartilage		1	fragme	0
-21.6E-204NL7	Mammalia								tooth		6	fragme	0
-21.6E-204NL7	Mammalia	Artiodactyla	Bovidae			bovid			incisor		1	comple	0
-21.6E-204NL7	lm/mm						epiphys	indeterminate	vert		4	fragme	1
-21.6E-204NL7	lm							indeterminate	long bone		68	fragme	58
-21.6E-204NL7	lm							indeterminate	rib/spine		20	fragme	28
-21.6E-204NL7	lm							indeterminate	skull		7	fragme	15
-21.6E-204NL7	lm/mm							indeterminate	indeterminate		16	fragme	11
-21.6E-204NL7	mm							indeterminate	long bone		54	fragme	17
-21.6E-204NL7	mm							indeterminate	rib/spine		68	fragme	28
-21.6E-204NL7	Reptilia	Sauria				M lizard		fused	vert		1	comple	0
-21.6E-204NL7	Osteichthyes					S fish		fused	vert		5	fragme	0
-21.6E-204NL7	sm						Proxim	fused	femur		1	1/2	0
-21.6E-204NL7	sm						Distal	fused	femur		1	comple	0
-21.6E-204NL7	sm						Distal	fused	humerus		1	3/4	0
-21.6E-204NL7	Mammalia	Rodentia				rat/mouse		fused	mandible		2	fragme	0
-21.6E-204NL7	Aves					bird		indeterminate	long bone		1	fragme	1
-21.6E-204NL7	Reptilia					reptile		indeterminate	skull		17	fragme	3
-21.6E-204NL7	unident							indeterminate	indeterminate			fragme	33
-21.6E-204NL7	lm						Proxim	unfused	humerus		1	1/2	12
-21.6E-204NL7	Mammalia	Artiodactyla	Suidae	Sus		pig	Proxim	fused	5th metacarpal		1	1/4	3
-21.6E-204NL7	Aves					bird		fused	tarsometatarsus		1	1/4	0
-21.6E-204NL7	Mammalia	Artiodactyla	Suidae	Sus		pig	Distal	fused	metapodial		1	fragme	0
-21.6E-204NL7	lm						Proxim	fused	femur		1	1/4	12

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL6		long bone	b=5, c=2
-21.6E-204NL6		rib/spine	b=14, c=3
-21.6E-204NL6		skull	b=6
-21.6E-204NL6		indeterminate	b=3, c=1
-21.6E-204NL6		long bone	
-21.6E-204NL7		phalanx	
-21.6E-204NL7		phalanx	
-21.6E-204NL7		vert, cervical	
-21.6E-204NL7	turtle	plastron	
-21.6E-204NL7		hyoid	pc=1, cut=1
-21.6E-204NL7		costal cartilage	
-21.6E-204NL7		tooth	
-21.6E-204NL7	bovid	incisor	
-21.6E-204NL7		vert	
-21.6E-204NL7		long bone	pc=3
-21.6E-204NL7		rib/spine	
-21.6E-204NL7		skull	
-21.6E-204NL7		indeterminate	c=2
-21.6E-204NL7		long bone	b=11, c=3
-21.6E-204NL7		rib/spine	b=15
-21.6E-204NL7	M lizard	vert	
-21.6E-204NL7	S fish	vert	
-21.6E-204NL7		femur	
-21.6E-204NL7		femur	
-21.6E-204NL7		humerus	
-21.6E-204NL7	rat/mouse	mandible	
-21.6E-204NL7	bird	long bone	sf=1
-21.6E-204NL7	reptile	skull	
-21.6E-204NL7		indeterminate	
-21.6E-204NL7		humerus	
-21.6E-204NL7	pig	5th metacarpal	
-21.6E-204NL7	bird	tarsometatarsus	
-21.6E-204NL7	pig	metapodial	
-21.6E-204NL7		femur	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-204NL7	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	occipital		1	<1/4	3
-21.6E-204NL7	lm							indeterminate	vert		8	fragme	32
-21.6E-204NL7	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	fused	phalanx		1	<1/4	0
-21.6E-204NL7	lm							indeterminate	skull		39	fragme	75
-21.6E-204NL7	lm							indeterminate	long bone		53	fragme	128
-21.6E-204NL7	lm							indeterminate	rib/spine		59	fragme	62
-21.6E-204NL7	lm							indeterminate	indeterminate		42	fragme	49
-21.6E-204NL7	lm						blade	fused	scapula		1	<1/4	8
-21.6E-204NL7	Mammalia								tooth		21	fragme	4
-21.6E-204NL7	Mammalia	Artiodactyla	Suidae	Sus		pig			molar		1	fragme	0
-21.6E-204NL7	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		unerupted	molar		1	fragme	7
-21.6E-204NL7	Aves	Falconiformes				bird of prey		fused	4th phalanx		1	fragme	0
-21.6E-204NL7	Aves					bird		indeterminate	long bone		3	fragme	0
-21.6E-204NL7	mm							indeterminate	long bone		23	fragme	15
-21.6E-204NL7	mm							indeterminate	rib/spine		62	fragme	18
-21.6E-204NL7	mm							indeterminate	indeterminate		77	fragme	19
-21.6E-204NL7	sm							indeterminate	long bone		12	fragme	1
-21.6E-204NL7	Aves/Reptilia					bird/reptile		indeterminate	skull		9	fragme	3
-21.6E-204NL7	Osteichthyes					fish		fused	vert		1	comple	0
-21.6E-204NL7	Mammalia								antler		2	fragme	3
-21.6E-204NL7	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	unfused	phalanx		1	fragme	0
-21.6E-204NL7	unident							indeterminate	indeterminate			fragme	91
-21.6E-204NL7	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	0
-21.6E-204NL7	lm							indeterminate	ilium		1	1/2	91
-21.6E-204NL7	lm							indeterminate	long bone		1	fragme	3
-21.6E-204NL7	mm							indeterminate	long bone		2	fragme	1
-21.6E-204NL7	lm							indeterminate	long bone		4	fragme	9
-21.6E-204NL7	mm							indeterminate	rib/spine		2	fragme	1
-21.6E-204NL7	lm							indeterminate	indeterminate		1	fragme	1
-21.6E-204NL7	mm							indeterminate	indeterminate		4	fragme	1
-21.6E-204NL8	Mammalia	Artiodactyla	Bovidae			bovid		fused	innominate		1	1/2	16
-21.6E-204NL8	Mammalia	Artiodactyla	Bovidae			bovid	Proxim	unfused	tibia		1	1/2	3
-21.6E-204NL8	Mammalia	Artiodactyla	Bovidae			bovid	epiphy:	unfused	tibia		1	comple	3
-21.6E-204NL8	Mammalia							indeterminate	indeterminate		10	fragme	17

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL7	pig	occipital	
-21.6E-204NL7		vert	
-21.6E-204NL7	sheep/goat/de	phalanx	
-21.6E-204NL7		skull	cut=1
-21.6E-204NL7		long bone	pc=3, sf=1
-21.6E-204NL7		rib/spine	b=1, pc=8
-21.6E-204NL7		indeterminate	b=1
-21.6E-204NL7		scapula	
-21.6E-204NL7		tooth	
-21.6E-204NL7	pig	molar	
-21.6E-204NL7	zebu/buffalo	molar	
-21.6E-204NL7	bird of prey	4th phalanx	
-21.6E-204NL7	bird	long bone	c=1
-21.6E-204NL7		long bone	b=3, c=1
-21.6E-204NL7		rib/spine	pc=6, c=1
-21.6E-204NL7		indeterminate	b=3, pc=1
-21.6E-204NL7		long bone	b=1
-21.6E-204NL7	bird/reptile	skull	
-21.6E-204NL7	fish	vert	diam = 15
-21.6E-204NL7		antler	
-21.6E-204NL7	sheep/goat/de	phalanx	
-21.6E-204NL7		indeterminate	
-21.6E-204NL7	softshell turtle	carapace	
-21.6E-204NL7		ilium	
-21.6E-204NL7		long bone	
-21.6E-204NL7		long bone	b=1
-21.6E-204NL7		long bone	b=1, pc=3
-21.6E-204NL7		rib/spine	b=1
-21.6E-204NL7		indeterminate	
-21.6E-204NL7		indeterminate	
-21.5E-204NL8	bovid	innominate	dev=fetal/newborn
-21.5E-204NL8	bovid	tibia	dev=fetal/newborn
-21.5E-204NL8	bovid	tibia	dev=fetal/newborn
-21.5E-204NL8		indeterminate	dev=fetal/newborn

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-204NL8	Reptilia	Sauria				lizard		fused	vert		3	3/4+	5
-21.6E-204NL8	Reptilia	Testudines				S turtle	Proxim	fused	humerus		1	1/4	0
-21.6E-204NL8	Reptilia	Testudines				S turtle		fused	carapace		1	fragme	0
-21.6E-204NL8	Osteichthyes					S fish		fused	vert		1	fragme	0
-21.6E-204NL8	Reptilia	Squamata				S snake		fused	vert		1	fragme	0
-21.6E-204NL8	Reptilia	Sauria				M lizard		fused	vert		1	fragme	0
-21.6E-204NL8	lm/mm							fused	costal cartilage		4	fragme	3
-21.6E-204NL8	Mammalia								tooth		14	fragme	3
-21.6E-204NL8	lm							indeterminate	long bone		70	fragme	116
-21.6E-204NL8	lm							indeterminate	rib/spine		10	fragme	20
-21.6E-204NL8	lm							indeterminate	skull		11	fragme	17
-21.6E-204NL8	lm							indeterminate	indeterminate		13	fragme	15
-21.6E-204NL8	mm							indeterminate	long bone		25	fragme	13
-21.6E-204NL8	mm							indeterminate	rib/spine		56	fragme	21
-21.6E-204NL8	sm							indeterminate	indeterminate		8	fragme	3
-21.6E-204NL8	unident							indeterminate	indeterminate			fragme	98
-21.6E-204NL8	Mammalia	Artiodactyla	Bovidae			bovid		fused	3rd Phalanx		1	comple	3
-21.6E-204NL8	Mammalia	Artiodactyla	Bovidae			L bovid		fused	astragalus		1	comple	4
-21.6E-204NL9	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2/5 metacarpal		1	comple	1
-21.6E-204NL9	Osteichthyes					fish	spine	fused	vert		1	fragme	0
-21.6E-204NL9	Osteichthyes					L fish		fused	vert		1	fragme	0
-21.6E-204NL9	Osteichthyes					S fish		fused	vert		3	fragme	0
-21.6E-204NL9	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	plastron		1	fragme	0
-21.6E-204NL9	mm							indeterminate	long bone		8	fragme	1
-21.6E-204NL9	mm							unfused	vert, caudal		1	fragme	0
-21.6E-204NL9	mm							indeterminate	vert		2	fragme	1
-21.6E-204NL9	mm						Distal	indeterminate	phalanx		1	<1/4	0
-21.6E-204NL9	Aves/Reptilia					bird/reptile		indeterminate	skull		2	fragme	0
-21.6E-204NL9	Reptilia	Sauria				S lizard		fused	maxilla		1	fragme	0
-21.6E-204NL9	mm/sm							fused	scapula		1	1/4	4
-21.6E-204NL9	mm							fused	innominate		2	fragme	8
-21.6E-204NL9	lm/mm							unerupted	molar		2	fragme	0
-21.6E-204NL9	Mammalia	Artiodactyla				ruminant			molar		11	fragme	14
-21.6E-204NL9	Mammalia								tooth		22	fragme	6
-21.6E-204NL9	lm							fused	costal cartilage		1	fragme	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.5E-204NL8	lizard	vert	
-21.5E-204NL8	S turtle	humerus	
-21.5E-204NL8	S turtle	carapace	
-21.5E-204NL8	S fish	vert	
-21.5E-204NL8	S snake	vert	
-21.5E-204NL8	M lizard	vert	
-21.5E-204NL8		costal cartilage	
-21.5E-204NL8		tooth	
-21.5E-204NL8		long bone	b=3, cut=1
-21.5E-204NL8		rib/spine	b=1
-21.5E-204NL8		skull	c=1
-21.5E-204NL8		indeterminate	
-21.5E-204NL8		long bone	c=1
-21.5E-204NL8		rib/spine	b=8, pc=3
-21.5E-204NL8		indeterminate	
-21.5E-204NL8		indeterminate	
-21.6E-204NL8	bovid	3rd Phalanx	dev=fetal/newborn, DLS 40.57 Ld 32.30 MBS 11.62
-21.6E-204NL8	L bovid	astragalus	dev=fetal/newborn, GL1 26.47 GLm 28.24 D1 15.22
-21.6E-204NL9	zebu	2/5 metacarpal	
-21.6E-204NL9	fish	vert	
-21.6E-204NL9	L fish	vert	
-21.6E-204NL9	S fish	vert	
-21.6E-204NL9	softshell turtle	plastron	
-21.6E-204NL9		long bone	dev=fetal/newborn
-21.6E-204NL9		vert, caudal	dev=fetal/newborn
-21.6E-204NL9		vert	dev=fetal/newborn
-21.6E-204NL9		phalanx	
-21.6E-204NL9	bird/reptile	skull	
-21.6E-204NL9	S lizard	maxilla	
-21.6E-204NL9		scapula	
-21.6E-204NL9		innominate	
-21.6E-204NL9		molar	
-21.6E-204NL9	ruminant	molar	
-21.6E-204NL9		tooth	
-21.6E-204NL9		costal cartilage	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL9	mm							fused	costal cartilage		1	fragme	3
-21.6E-204NL9	Mammalia								antler		5	fragme	7
-21.6E-204NL9	lm							fused	sesamoid		1	3/4	2
-21.6E-204NL9	Reptilia	Squamata				snake		fused	mandible		1	<1/4	0
-21.6E-204NL9	mm							fused	vert, thoracic		4	fragme	2
-21.6E-204NL9	lm/mm						epiphy:	unfused	vert		3	fragme	3
-21.6E-204NL9	Aves					bird		indeterminate	long bone		3	fragme	2
-21.6E-204NL9	lm							indeterminate	long bone		26	fragme	31
-21.6E-204NL9	lm							indeterminate	rib/spine		14	fragme	14
-21.6E-204NL9	lm							indeterminate	skull		15	fragme	16
-21.6E-204NL9	lm							indeterminate	indeterminate		27	fragme	45
-21.6E-204NL9	mm							indeterminate	long bone		62	fragme	26
-21.6E-204NL9	mm							indeterminate	rib/spine		71	fragme	22
-21.6E-204NL9	unident							indeterminate	indeterminate			fragme	77
-21.6E-204NL9	sm							fused	1st phalanx	left	1	comple	0
-21.6E-204NL9	sm							fused	2nd phalanx	left	1	comple	0
-21.6E-204NL9	Mammalia								tooth		2	fragme	0
-21.6E-204NL9	lm							indeterminate	indeterminate		10	fragme	17
-21.6E-204NL9	lm							indeterminate	long bone		46	fragme	37
-21.6E-204NL9	lm						Distal	indeterminate	long bone		1	<1/4	10
-21.6E-204NL9	lm							indeterminate	rib/spine		6	fragme	4
-21.6E-204NL9	lm							indeterminate	vert		1	fragme	3
-21.6E-204NL9	mm							indeterminate	long bone		52	fragme	12
-21.6E-204NL9	mm							indeterminate	rib/spine		24	fragme	10
-21.6E-204NL9	mm							indeterminate	indeterminate		28	fragme	10
-21.6E-204NL9	mm							indeterminate	skull		3	fragme	2
-21.6E-204NL9	Aves					bird		indeterminate	indeterminate		3	fragme	1
-21.6E-204NL9	sm							indeterminate	long bone		1	fragme	0
-21.6E-204NL9	sm/bird					sm/bird		indeterminate	skull		1	fragme	0
-21.6E-204NL9	unident							indeterminate	indeterminate			fragme	36
-21.6E-204NL9	lm							indeterminate	long bone		15	fragme	15
-21.6E-204NL9	mm						Distal	indeterminate	phalanx		1	<1/4	0
-21.6E-204NL9	lm/mm							indeterminate	rib/spine		6	fragme	1
-21.6E-204NL9	mm							indeterminate	long bone		5	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL9		costal cartilage	
-21.6E-204NL9		antler	
-21.6E-204NL9		sesamoid	
-21.6E-204NL9	snake	mandible	
-21.6E-204NL9		vert, thoracic	
-21.6E-204NL9		vert	
-21.6E-204NL9	bird	long bone	
-21.6E-204NL9		long bone	b=4, c=2
-21.6E-204NL9		rib/spine	pc=2, c=1
-21.6E-204NL9		skull	
-21.6E-204NL9		indeterminate	b=4, c=1
-21.6E-204NL9		long bone	b=8, c=2
-21.6E-204NL9		rib/spine	b=5, pc=11, c=6
-21.6E-204NL9		indeterminate	
-21.6E-204NL9		1st phalanx	
-21.6E-204NL9		2nd phalanx	
-21.6E-204NL9		tooth	
-21.6E-204NL9		indeterminate	
-21.6E-204NL9		long bone	b=1
-21.6E-204NL9		long bone	
-21.6E-204NL9		rib/spine	
-21.6E-204NL9		vert	
-21.6E-204NL9		long bone	b=1, c=1
-21.6E-204NL9		rib/spine	b=6
-21.6E-204NL9		indeterminate	b=2
-21.6E-204NL9		skull	
-21.6E-204NL9	bird	indeterminate	
-21.6E-204NL9		long bone	
-21.6E-204NL9	sm/bird	skull	
-21.6E-204NL9		indeterminate	
-21.6E-204NL9		long bone	b=3, c=1
-21.6E-204NL9		phalanx	b=1
-21.6E-204NL9		rib/spine	b=4
-21.6E-204NL9		long bone	b=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL10	lm/mm							fused	costal cartilage		1	fragme	6
-21.6E-204NL10	Mammalia	Artiodactyla	Bovidae			L bovid	Distal	fused	2nd phalanx		1	1/2	8
-21.6E-204NL10	Mammalia	Artiodactyla	Bovidae			bovid	Proxim	fused	1st phalanx		1	1/4	4
-21.6E-204NL10	lm							fused	innominate		2	fragme	18
-21.6E-204NL10	Mammalia	Artiodactyla	Bovidae			bovid	Distal	fused	1st phalanx		1	<1/4	0
-21.6E-204NL10	lm						Distal	fused	calcaneus		1	<1/4	3
-21.6E-204NL10	mm						Distal	fused	long bone		1	1/4	5
-21.6E-204NL10	lm/mm							indeterminate	vert		2	fragme	2
-21.6E-204NL10	lm/mm							unfused	3rd Phalanx		1	1/4	0
-21.6E-204NL10	lm/mm						spine	unfused	vert, lumbar		1	fragme	0
-21.6E-204NL10	Reptilia	Testudines	Emydidae	Kachuga	tentoria	Indian tent turtle		fused	coracoid		2	fragme	0
-21.6E-204NL10	Reptilia	Testudines				turtle	Proxim	fused	humerus		1	1/2	1
-21.6E-204NL10	Reptilia	Squamata	Colubridae			snake		fused	vert		1	comple	0
-21.6E-204NL10	sm							fused	phalanx		1	comple	0
-21.6E-204NL10	Amphibia	Anura				frog/toad		fused	pelvis		1	comple	0
-21.6E-204NL10	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Lateral Malleolus		1	comple	5
-21.6E-204NL10	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	2
-21.6E-204NL10	Osteichthyes					fish		fused	vert		1	comple	0
-21.6E-204NL10	sm							indeterminate	long bone		4	fragme	0
-21.6E-204NL10	sm							indeterminate	skull		4	fragme	0
-21.6E-204NL10	Mammalia							indeterminate	tooth		14	fragme	4
-21.6E-204NL10	Mammalia	Artiodactyla	Suidae	Sus		pig		unerupted	molar	lower	1	comple	0
-21.6E-204NL10	lm/mm							unfused	vert		3	fragme	8
-21.6E-204NL10	lm/mm							indeterminate	vert		6	fragme	15
-21.6E-204NL10	lm							indeterminate	long bone		64	fragme	72
-21.6E-204NL10	lm							indeterminate	rib/spine		26	fragme	26
-21.6E-204NL10	lm							indeterminate	skull		23	fragme	32
-21.6E-204NL10	lm/mm							indeterminate	indeterminate		65	fragme	67
-21.6E-204NL10	mm							indeterminate	long bone		39	fragme	19
-21.6E-204NL10	mm							indeterminate	rib/spine		88	fragme	32
-21.6E-204NL10	mm							indeterminate	vert		1	fragme	2
-21.6E-204NL10	unident							indeterminate	indeterminate			fragme	175
-21.6E-204NL10	lm							indeterminate	long bone		17	fragme	16

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL10		costal cartilage	
-21.6E-204NL10	L bovid	2nd phalanx	Bd 27.69
-21.6E-204NL10	bovid	1st phalanx	dev=fetal/newborn
-21.6E-204NL10		innominate	dev=fetal/newborn
-21.6E-204NL10	bovid	1st phalanx	
-21.6E-204NL10		calcaneus	
-21.6E-204NL10		long bone	
-21.6E-204NL10		vert	dev=fetal/newborn
-21.6E-204NL10		3rd Phalanx	dev=fetal/newborn, pc=1
-21.6E-204NL10		vert, lumbar	dev=fetal/newborn, pc=1
-21.6E-204NL10	Indian tent turtl	coracoid	
-21.6E-204NL10	turtle	humerus	
-21.6E-204NL10	snake	vert	b=1
-21.6E-204NL10		phalanx	
-21.6E-204NL10	frog/toad	pelvis	
-21.6E-204NL10	zebu/buffalo	Lateral Malleolus	
-21.6E-204NL10	softshell turtle	carapace	b=1
-21.6E-204NL10	fish	vert	
-21.6E-204NL10		long bone	b=2
-21.6E-204NL10		skull	
-21.6E-204NL10		tooth	
-21.6E-204NL10	pig	molar	
-21.6E-204NL10		vert	
-21.6E-204NL10		vert	
-21.6E-204NL10		long bone	b=2
-21.6E-204NL10		rib/spine	b=2, c=2
-21.6E-204NL10		skull	b=1
-21.6E-204NL10		indeterminate	b=6, pc=1
-21.6E-204NL10		long bone	b=4
-21.6E-204NL10		rib/spine	b=19
-21.6E-204NL10		vert	
-21.6E-204NL10		indeterminate	
-21.6E-204NL10		long bone	b=10

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
-21.6E-204NL10	lm							indeterminate	indeterminate		1	fragme	1
-21.6E-204NL10	lm							indeterminate	rib/spine		2	fragme	2
-21.6E-204NL10	mm							indeterminate	indeterminate		5	fragme	2
-21.6E-204NL11	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2nd phalanx		1	comple	9
-21.6E-204NL11	Mammalia	Artiodactyla	Bovidae			L bovid		fused	carpal/tarsal		1	comple	7
-21.6E-204NL11	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	fused	phalanx		2	1/4	2
-21.6E-204NL11	Mammalia	Artiodactyla	Bovidae			L bovid	Distal	fused	phalanx		1	<1/4	2
-21.6E-204NL11	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		fused	3rd Phalanx		2	comple	0
-21.6E-204NL11	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	plastron		1	fragme	0
-21.6E-204NL11	Reptilia	Testudines				turtle		fused	carapace		5	comple	2
-21.6E-204NL11	Reptilia	Testudines				turtle		fused	carapace/plastron		3	fragme	1
-21.6E-204NL11	Osteichthyes					fish		fused	vert		3	comple	2
-21.6E-204NL11	sm							indeterminate	long bone		2	fragme	0
-21.6E-204NL11	Aves/Reptilia					bird/reptile		indeterminate	skull		11	fragme	2
-21.6E-204NL11	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		3	fragme	0
-21.6E-204NL11	Aves					bird		indeterminate	long bone		3	fragme	2
-21.6E-204NL11	Mammalia								antler		4	fragme	2
-21.6E-204NL11	lm							indeterminate	long bone		90	fragme	136
-21.6E-204NL11	lm							indeterminate	rib/spine		44	fragme	86
-21.6E-204NL11	lm							indeterminate	skull		20	fragme	48
-21.6E-204NL11	lm							indeterminate	indeterminate		45	fragme	68
-21.6E-204NL11	lm							indeterminate	vert		3	<1/4	21
-21.6E-204NL11	Mammalia								tooth		15	fragme	15
-21.6E-204NL11	mm							indeterminate	long bone		132	fragme	44
-21.6E-204NL11	mm							indeterminate	rib/spine		100	fragme	28
-21.6E-204NL11	mm							indeterminate	skull		3	fragme	6
-21.6E-204NL11	mm							indeterminate	indeterminate		123	fragme	46
-21.6E-204NL11	unident							indeterminate	indeterminate			fragme	118
-21.6E-204NL11	mm							fused	phalanx		1	comple	0
-21.6E-204NL11	Aves	Galliformes	Phasianidae	Gallus		junglefowl		fused	4th phalanx		1	comple	0
-21.6E-204NL11	mm							fused	carpal/tarsal		1	comple	1
-21.6E-204NL11	Aves					bird		indeterminate	long bone		1	fragme	1
-21.6E-204NL11	Osteichthyes					L freshwater fish		indeterminate	skull roof		1	fragme	2
-21.6E-204NL11	Osteichthyes					fish		indeterminate	indeterminate		2	fragme	3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL10		indeterminate	
-21.6E-204NL10		rib/spine	b=1, pc=1
-21.6E-204NL10		indeterminate	b=2
-21.6E-204NL11	zebu	2nd phalanx	GL 39.94 Bd 22.08 Bp 26.75
-21.6E-204NL11	L bovid	carpal/tarsal	
-21.6E-204NL11	sheep/goat/de	phalanx	
-21.6E-204NL11	L bovid	phalanx	
-21.6E-204NL11	Indian Hare	3rd Phalanx	
-21.6E-204NL11	softshell turtle	plastron	
-21.6E-204NL11	turtle	carapace	
-21.6E-204NL11	turtle	carapace/plastron	
-21.6E-204NL11	fish	vert	large fish
-21.6E-204NL11		long bone	
-21.6E-204NL11	bird/reptile	skull	
-21.6E-204NL11	bird/reptile	indeterminate	
-21.6E-204NL11	bird	long bone	
-21.6E-204NL11		antler	b=1
-21.6E-204NL11		long bone	
-21.6E-204NL11		rib/spine	b=2
-21.6E-204NL11		skull	
-21.6E-204NL11		indeterminate	b=3
-21.6E-204NL11		vert	
-21.6E-204NL11		tooth	
-21.6E-204NL11		long bone	b=4
-21.6E-204NL11		rib/spine	b=5, pc=1
-21.6E-204NL11		skull	
-21.6E-204NL11		indeterminate	b=6
-21.6E-204NL11		indeterminate	
-21.6E-204NL11		phalanx	
-21.6E-204NL11	junglefowl	4th phalanx	
-21.6E-204NL11		carpal/tarsal	
-21.6E-204NL11	bird	long bone	
-21.6E-204NL11	L freshwater fi	skull roof	
-21.6E-204NL11	fish	indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL11	lm/mm						blade	indeterminate	scapula		1	<1/4	4
-21.6E-204NL11	lm						Proxim	indeterminate	rib		1	1/4	2
-21.6E-204NL11	lm/mm							indeterminate	long bone		2	fragme	1
-21.6E-204NL11	lm/mm						Distal	fused	phalanx		1	1/4	0
-21.6E-204NL11	Mammalia								tooth		8	fragme	2
-21.6E-204NL11	Mammalia								antler		2	fragme	1
-21.6E-204NL11	mm							fused	costal cartilage		1	fragme	1
-21.6E-204NL11	Reptilia					reptile		fused	vert		1	1/4	0
-21.6E-204NL11	Osteichthyes					fish		fused	vert		9	fragme	0
-21.6E-204NL11	Aves					bird		indeterminate	long bone		2	fragme	1
-21.6E-204NL11	lm							indeterminate	skull		3	fragme	17
-21.6E-204NL11	lm							indeterminate	indeterminate		6	fragme	3
-21.6E-204NL11	lm							indeterminate	long bone		17	fragme	52
-21.6E-204NL11	lm							indeterminate	rib/spine		12	fragme	23
-21.6E-204NL11	mm							indeterminate	indeterminate		100	fragme	44
-21.6E-204NL11	mm							indeterminate	long bone		170	fragme	67
-21.6E-204NL11	mm							indeterminate	rib/spine		120	fragme	42
-21.6E-204NL11	mm							indeterminate	skull		5	fragme	4
-21.6E-204NL11	Osteichthyes					fish		fused	ceratohyal		1	fragme	0
-21.6E-204NL11	Osteichthyes					fish		indeterminate	indeterminate		2	fragme	0
-21.6E-204NL11	unident							indeterminate	indeterminate			fragme	92
-21.6E-204NL11	lm							indeterminate	long bone		1	fragme	1
-21.6E-204NL11	lm							indeterminate	long bone		7	fragme	9
-21.6E-204NL11	lm							indeterminate	indeterminate		2	fragme	2
-21.6E-204NL11	lm							indeterminate	rib/spine		2	fragme	4
-21.6E-204NL11	mm							indeterminate	rib/spine		4	fragme	1
-21.6E-204NL11	mm							indeterminate	long bone		1	fragme	0
-21.6E-204NL11	mm							indeterminate	indeterminate		5	fragme	0
-21.6E-204NL12	Mammalia	Artiodactyla	Suidae	Sus		pig		unerupted	molar		1	1/4	1
-21.6E-204NL12	lm/mm								molar		1	fragme	1
-21.6E-204NL12	Mammalia	Artiodactyla	Cervidae			deer sp.			incisor		1	fragme	1
-21.6E-204NL12	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	right	1	3/4	8
-21.6E-204NL12	lm						Proxim	fused	phalanx		1	1/4	3
-21.6E-204NL12	lm						Distal	unfused	long bone		1	1/2	6

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL11		scapula	
-21.6E-204NL11		rib	dev=fetal/newborn
-21.6E-204NL11		long bone	dev=fetal/newborn
-21.6E-204NL11		phalanx	
-21.6E-204NL11		tooth	
-21.6E-204NL11		antler	
-21.6E-204NL11		costal cartilage	
-21.6E-204NL11	reptile	vert	
-21.6E-204NL11	fish	vert	diam = 5.3
-21.6E-204NL11	bird	long bone	
-21.6E-204NL11		skull	
-21.6E-204NL11		indeterminate	b=1
-21.6E-204NL11		long bone	b=5
-21.6E-204NL11		rib/spine	
-21.6E-204NL11		indeterminate	b=5
-21.6E-204NL11		long bone	b=9
-21.6E-204NL11		rib/spine	b=4, pc=3
-21.6E-204NL11		skull	
-21.6E-204NL11	fish	ceratohyal	
-21.6E-204NL11	fish	indeterminate	
-21.6E-204NL11		indeterminate	
-21.6E-204NL11		long bone	b=1, w=1
-21.6E-204NL11		long bone	b=1, pc=3
-21.6E-204NL11		indeterminate	b=1
-21.6E-204NL11		rib/spine	pc=1
-21.6E-204NL11		rib/spine	b=2
-21.6E-204NL11		long bone	b=1
-21.6E-204NL11		indeterminate	b=3
-21.6E-204NL12	pig	molar	
-21.6E-204NL12		molar	dev=adult, resorbed alveolus
-21.6E-204NL12	deer sp.	incisor	
-21.6E-204NL12	zebu/buffalo	2nd phalanx	Bp 26.19
-21.6E-204NL12		phalanx	
-21.6E-204NL12		long bone	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
-21.6E-204NL12	lm							fused	mandible	left	1	1/4	24
-21.6E-204NL12	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	ulnar carpal		1	comple	2
-21.6E-204NL12	mm							fused	innominate		3	1/4	13
-21.6E-204NL12	lm						blade	fused	scapula		2	fragme	26
-21.6E-204NL12	lm							indeterminate	long bone		45	fragme	106
-21.6E-204NL12	lm							indeterminate	rib/spine		18	fragme	39
-21.6E-204NL12	lm							indeterminate	vert		16	fragme	42
-21.6E-204NL12	lm							unfused	vert		3	fragme	7
-21.6E-204NL12	lm							indeterminate	skull		19	fragme	25
-21.6E-204NL12	Mammalia								tooth		11	fragme	5
-21.6E-204NL12	lm							indeterminate	indeterminate		15	fragme	33
-21.6E-204NL12	mm							indeterminate	long bone		30	fragme	8
-21.6E-204NL12	mm							indeterminate	rib/spine		65	fragme	25
-21.6E-204NL12	mm							indeterminate	indeterminate		42	fragme	19
-21.6E-204NL12	unident							indeterminate	indeterminate			fragme	18
-21.6E-204NL12	lm						Distal	fusing	metapodial		1	fragme	28
-21.6E-204NL12	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		4	fragme	1
-21.6E-204NL12	Reptilia	Testudines				turtle		fused	maxilla	right	1	fragme	0
-21.6E-204NL12	Reptilia	Testudines	Emydidae	Kachuga	tentoria	Indian tent turtle		fused	humerus		1	fragme	0
-21.6E-204NL12	Osteichthyes					fish		fused	vert		5	comple	0
-21.6E-204NL12	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		unfused	2nd phalanx		2	comple	2
-21.6E-204NL12	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	5th metacarpal		1	1/2	1
-21.6E-204NL12	lm							fused	astragalus		2	1/4	15
-21.6E-204NL12	lm							fused	sesamoid		2	comple	4
-21.6E-204NL12	lm						Distal	fused	phalanx		1	<1/4	2
-21.6E-204NL12	lm							fused	carpal/tarsal		1	comple	3
-21.6E-204NL12	lm						epiphys	unfused	long bone		1	1/4	2
-21.6E-204NL12	mm							fused	sesamoid		1	comple	0
-21.6E-204NL12	sm							fused	phalanx		1	3/4	0
-21.6E-204NL12	Mammalia	Carnivora	Canidae	Canis		canis sp.		fused	1st phalanx	left	1	comple	0
-21.6E-204NL12	Mammalia	Carnivora	Canidae	Canis		canis sp.		fused	2nd phalanx	left	1	comple	0
-21.6E-204NL12	lm							indeterminate	long bone		49	fragme	94
-21.6E-204NL12	lm							indeterminate	rib/spine		21	fragme	40
-21.6E-204NL12	lm							indeterminate	skull		7	fragme	19

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL12		mandible	
-21.6E-204NL12	pig	ulnar carpal	
-21.6E-204NL12		innominate	
-21.6E-204NL12		scapula	
-21.6E-204NL12		long bone	
-21.6E-204NL12		rib/spine	
-21.6E-204NL12		vert	
-21.6E-204NL12		vert	
-21.6E-204NL12		skull	
-21.6E-204NL12		tooth	
-21.6E-204NL12		indeterminate	
-21.6E-204NL12		long bone	
-21.6E-204NL12		rib/spine	
-21.6E-204NL12		indeterminate	
-21.6E-204NL12		indeterminate	
-21.6E-204NL12		metapodial	
-21.6E-204NL12	softshell turtle	carapace	
-21.6E-204NL12	turtle	maxilla	
-21.6E-204NL12	Indian tent turtl	humerus	smaller than modern Kachuga in photo
-21.6E-204NL12	fish	vert	diam = 5.3
-21.6E-204NL12	goat	2nd phalanx	dev=fetal/newborn
-21.6E-204NL12	pig	5th metacarpal	
-21.6E-204NL12		astragalus	
-21.6E-204NL12		sesamoid	
-21.6E-204NL12		phalanx	
-21.6E-204NL12		carpal/tarsal	
-21.6E-204NL12		long bone	
-21.6E-204NL12		sesamoid	
-21.6E-204NL12		phalanx	
-21.6E-204NL12	canis sp.	1st phalanx	smaller than jackal
-21.6E-204NL12	canis sp.	2nd phalanx	smaller than jackal
-21.6E-204NL12		long bone	b=1
-21.6E-204NL12		rib/spine	b=1
-21.6E-204NL12		skull	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL12	lm							indeterminate	indeterminate		34	fragme	72
-21.6E-204NL12	Mammalia								tooth		15	fragme	6
-21.6E-204NL12	mm							indeterminate	long bone		223	fragme	91
-21.6E-204NL12	mm							indeterminate	rib/spine		52	fragme	59
-21.6E-204NL12	mm							indeterminate	skull		4	fragme	4
-21.6E-204NL12	mm							indeterminate	indeterminate		115	fragme	55
-21.6E-204NL12	Mammalia								antler		7	fragme	3
-21.6E-204NL12	mm							fused	costal cartilage		1	fragme	0
-21.6E-204NL12	mm						Distal	fused	phalanx		1	1/4	0
-21.6E-204NL12	Aves					bird		indeterminate	long bone		3	fragme	0
-21.6E-204NL12	Aves/Reptilia					bird/reptile		indeterminate	skull		15	fragme	5
-21.6E-204NL12	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		8	fragme	0
-21.6E-204NL12	sm							indeterminate	long bone		7	fragme	0
-21.6E-204NL12	sm						Proxim	fused	scapula		1	1/2	0
-21.6E-204NL12	sm							indeterminate	vert		1	fragme	0
-21.6E-204NL12	mm/sm							unfused	long bone		2	fragme	0
-21.6E-204NL12	unident							indeterminate	indeterminate			fragme	167
-21.6E-204NL12	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx		1	1/2	6
-21.6E-204NL12	Mammalia								tooth		4	fragme	1
-21.6E-204NL12	sm							indeterminate	long bone		2	fragme	0
-21.6E-204NL12	sm							indeterminate	vert		1	fragme	0
-21.6E-204NL12	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		13	fragme	0
-21.6E-204NL12	mm							unfused	vert		1	<1/4	0
-21.6E-204NL12	lm							indeterminate	skull		2	fragme	1
-21.6E-204NL12	lm							indeterminate	long bone		13	fragme	38
-21.6E-204NL12	lm							indeterminate	rib/spine		4	fragme	5
-21.6E-204NL12	lm							indeterminate	rib		1	fragme	2
-21.6E-204NL12	lm							indeterminate	indeterminate		4	fragme	7
-21.6E-204NL12	mm							indeterminate	long bone		54	fragme	14
-21.6E-204NL12	mm							indeterminate	rib/spine		19	fragme	4
-21.6E-204NL12	mm							indeterminate	skull		5	fragme	3
-21.6E-204NL12	mm							indeterminate	indeterminate		21	fragme	6
-21.6E-204NL12	unident							indeterminate	indeterminate			fragme	26
-21.6E-204NL13	Osteichthyes					L freshwater fish		indeterminate	skull roof		1	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL12		indeterminate	b=3
-21.6E-204NL12		tooth	
-21.6E-204NL12		long bone	b=4, c=1
-21.6E-204NL12		rib/spine	b=4
-21.6E-204NL12		skull	
-21.6E-204NL12		indeterminate	b=3
-21.6E-204NL12		antler	
-21.6E-204NL12		costal cartilage	
-21.6E-204NL12		phalanx	
-21.6E-204NL12	bird	long bone	
-21.6E-204NL12	bird/reptile	skull	
-21.6E-204NL12	bird/reptile	indeterminate	
-21.6E-204NL12		long bone	pc=1
-21.6E-204NL12		scapula	
-21.6E-204NL12		vert	
-21.6E-204NL12		long bone	
-21.6E-204NL12		indeterminate	
-21.6E-204NL12	zebu/buffalo	2nd phalanx	
-21.6E-204NL12		tooth	
-21.6E-204NL12		long bone	
-21.6E-204NL12		vert	
-21.6E-204NL12	bird/reptile	indeterminate	
-21.6E-204NL12		vert	
-21.6E-204NL12		skull	
-21.6E-204NL12		long bone	b=2
-21.6E-204NL12		rib/spine	
-21.6E-204NL12		rib	
-21.6E-204NL12		indeterminate	b=1
-21.6E-204NL12		long bone	b=1
-21.6E-204NL12		rib/spine	b=2, c=1
-21.6E-204NL12		skull	
-21.6E-204NL12		indeterminate	b=1
-21.6E-204NL12		indeterminate	
-21.6E-204NL13	L freshwater fis	skull roof	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL13	Osteichthyes					L fish		indeterminate	indeterminate		5	fragme	11
-21.6E-204NL13	Aves	Galliformes	Phasianidae	Gallus		junglefowl		fused	4th phalanx		1	comple	0
-21.6E-204NL13	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	acetabulum		1	fragme	17
-21.6E-204NL13	lm						Distal	fused	humerus		1	1/2	117
-21.6E-204NL13	lm/mm						blade	fused	scapula		1	<1/4	7
-21.6E-204NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar		1	comple	6
-21.6E-204NL13	lm							indeterminate	skull		12	fragme	25
-21.6E-204NL13	lm							indeterminate	mandible		5	fragme	25
-21.6E-204NL13	lm							indeterminate	long bone		16	fragme	31
-21.6E-204NL13	lm							indeterminate	rib/spine		21	fragme	44
-21.6E-204NL13	lm							indeterminate	indeterminate		21	fragme	42
-21.6E-204NL13	Mammalia								tooth		10	fragme	3
-21.6E-204NL13	mm							indeterminate	costal cartilage		6	fragme	4
-21.6E-204NL13	mm							indeterminate	long bone		114	fragme	39
-21.6E-204NL13	mm							indeterminate	rib/spine		98	fragme	32
-21.6E-204NL13	mm							indeterminate	skull		37	fragme	19
-21.6E-204NL13	mm						blade	fused	scapula		2	fragme	1
-21.6E-204NL13	mm							indeterminate	indeterminate		128	fragme	59
-21.6E-204NL13	lm							indeterminate	vert		2	fragme	10
-21.6E-204NL13	lm							unfused	vert		1	fragme	5
-21.6E-204NL13	lm							unfused	vert, caudal		1	3/4	3
-21.6E-204NL13	lm/mm							indeterminate	vert		2	fragme	6
-21.6E-204NL13	sm							unfused	phalanx		1	comple	0
-21.6E-204NL13	mm/sm							fused	petris temporal		1	fragme	0
-21.6E-204NL13	Aves/Reptilia					bird/reptile		indeterminate	skull		1	fragme	3
-21.6E-204NL13	Reptilia	Testudines				turtle		fused	coracoid		1	3/4	0
-21.6E-204NL13	sm							indeterminate	vert		1	1/4	0
-21.6E-204NL13	Reptilia	Testudines				turtle		fused	plastron		1	fragme	0
-21.6E-204NL13	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	0
-21.6E-204NL13	sm/bird					sm/bird		indeterminate	indeterminate		4	fragme	0
-21.6E-204NL13	Aves					bird		indeterminate	long bone		1	fragme	0
-21.6E-204NL13	Osteichthyes					fish		indeterminate	vert		1	comple	0
-21.6E-204NL13	unident							indeterminate	indeterminate			fragme	73
-21.6E-204NL13	lm							indeterminate	indeterminate		1	fragme	3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL13	L fish	indeterminate	
-21.6E-204NL13	junglefowl	4th phalanx	
-21.6E-204NL13	sheep/goat/de	acetabulum	
-21.6E-204NL13		humerus	
-21.6E-204NL13		scapula	
-21.6E-204NL13	zebu/buffalo	premolar	
-21.6E-204NL13		skull	
-21.6E-204NL13		mandible	
-21.6E-204NL13		long bone	b=3
-21.6E-204NL13		rib/spine	
-21.6E-204NL13		indeterminate	b=2
-21.6E-204NL13		tooth	
-21.6E-204NL13		costal cartilag	b=1
-21.6E-204NL13		long bone	pc=6, c=2
-21.6E-204NL13		rib/spine	b=2, c=6
-21.6E-204NL13		skull	
-21.6E-204NL13		scapula	
-21.6E-204NL13		indeterminate	b=11
-21.6E-204NL13		vert	
-21.6E-204NL13		vert	
-21.6E-204NL13		vert, caudal	
-21.6E-204NL13		vert	
-21.6E-204NL13		phalanx	
-21.6E-204NL13		petris temporal	
-21.6E-204NL13	bird/reptile	skull	
-21.6E-204NL13	turtle	coracoid	
-21.6E-204NL13		vert	
-21.6E-204NL13	turtle	plastron	
-21.6E-204NL13	softshell turtle	carapace	
-21.6E-204NL13	sm/bird	indeterminate	
-21.6E-204NL13	bird	long bone	
-21.6E-204NL13	fish	vert	diam = 7.19
-21.6E-204NL13		indeterminate	
-21.6E-204NL13		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
-21.6E-204NL13	Reptilia	Testudines	Emydidae	Kachuga	tentoria	Indian tent turtle		fused	carapace		1	fragme	1
-21.6E-204NL13	lm							indeterminate	long bone		5	fragme	6
-21.6E-204NL13	mm							indeterminate	long bone		4	fragme	2
-21.6E-204NL13	unident							indeterminate	indeterminate			fragme	1
-21.6E-204NL14	lm							indeterminate	scapula		1	1/2	44
-21.6E-204NL14	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	tarsal 2/3	right	1	comple	5
-21.6E-204NL14	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	tarsal 2/3	left	1	comple	6
-21.6E-204NL14	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Lateral Malleolus		1	comple	3
-21.6E-204NL14	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory carpal		1	comple	4
-21.6E-204NL14	Mammalia								antler		4	fragme	2
-21.6E-204NL14	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	0
-21.6E-204NL14	Mammalia	Artiodactyla	Bovidae			L bovid	Proxim	fused	metacarpal		1	1/4	20
-21.6E-204NL14	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metapodial		1	<1/4	10
-21.6E-204NL14	lm							indeterminate	astragalus		3	1/2	11
-21.6E-204NL14	lm						Distal	indeterminate	phalanx		2	1/2	0
-21.6E-204NL14	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	1/4	10
-21.6E-204NL14	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	coronoid proc	right	1	comple	21
-21.6E-204NL14	lm							fused	premaxilla	right	1	fragme	39
-21.6E-204NL14	Mammalia								tooth		2	fragme	0
-21.6E-204NL14	lm							fusing	vert, thoracic		1	1/2	29
-21.6E-204NL14	lm							unfused	vert		2	fragme	9
-21.6E-204NL14	lm							indeterminate	vert		7	fragme	33
-21.6E-204NL14	lm							indeterminate	skull		31	fragme	62
-21.6E-204NL14	lm							indeterminate	long bone		51	fragme	92
-21.6E-204NL14	lm							indeterminate	indeterminate		63	fragme	89
-21.6E-204NL14	lm							indeterminate	rib/spine		21	fragme	24
-21.6E-204NL14	mm							indeterminate	long bone		114	fragme	44
-21.6E-204NL14	mm							indeterminate	rib/spine		21	fragme	8
-21.6E-204NL14	mm							indeterminate	indeterminate		87	fragme	39
-21.6E-204NL14	unident							indeterminate	indeterminate			fragme	153
-21.6E-204NL14	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	central tarsal		1	comple	25
-21.6E-204NL14	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	fused	scapula	right	1	1/2	13
-21.6E-204NL14	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	plastron		1	fragme	0
-21.6E-204NL14	mm							fused	costal cartilage		5	fragme	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL13	Indian tent turt	carapace	
-21.6E-204NL13		long bone	b=2
-21.6E-204NL13		long bone	b=1, c=1
-21.6E-204NL13		indeterminate	
-21.6E-204NL14		scapula	
-21.6E-204NL14	zebu/buffalo	tarsal 2/3	
-21.6E-204NL14	zebu/buffalo	tarsal 2/3	
-21.6E-204NL14	zebu/buffalo	Lateral Malleolus	
-21.6E-204NL14	zebu/buffalo	accessory carpal	
-21.6E-204NL14		antler	
-21.6E-204NL14	softshell turtle	carapace	
-21.6E-204NL14	L bovid	metacarpal	
-21.6E-204NL14	L artiodactyl	metapodial	
-21.6E-204NL14		astragalus	c=1
-21.6E-204NL14		phalanx	b=1
-21.6E-204NL14	L artiodactyl	metapodial	
-21.6E-204NL14	zebu/buffalo	coronoid process	
-21.6E-204NL14		premaxilla	
-21.6E-204NL14		tooth	
-21.6E-204NL14		vert, thoracic	hack=1
-21.6E-204NL14		vert	
-21.6E-204NL14		vert	hack=1
-21.6E-204NL14		skull	b=1
-21.6E-204NL14		long bone	pc=1
-21.6E-204NL14		indeterminate	b=2
-21.6E-204NL14		rib/spine	
-21.6E-204NL14		long bone	b=3, cut=1
-21.6E-204NL14		rib/spine	
-21.6E-204NL14		indeterminate	b=3, c=4
-21.6E-204NL14		indeterminate	
-21.6E-204NL14	zebu	central tarsal	GB 52.97
-21.6E-204NL14	goat	scapula	GLP 37.54, LG 30.31, BG 24.41
-21.6E-204NL14	softshell turtle	plastron	
-21.6E-204NL14		costal cartilage	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-204NL14	lm							indeterminate	scapula		5	fragme	35
-21.6E-204NL14	mm						Distal	indeterminate	phalanx		1	1/4	2
-21.6E-204NL14	lm							fused	accessory carpal		1	comple	2
-21.6E-204NL14	sm							indeterminate	scapula		1	fragme	0
-21.6E-204NL14	lm						Distal	indeterminate	phalanx		1	<1/4	1
-21.6E-204NL14	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metapodial		1	<1/4	1
-21.6E-204NL14	Mammalia							indeterminate	tooth		6	fragme	2
-21.6E-204NL14	lm							indeterminate	skull		9	fragme	22
-21.6E-204NL14	lm/mm							indeterminate	skull		12	fragme	7
-21.6E-204NL14	lm							indeterminate	long bone		17	fragme	47
-21.6E-204NL14	lm							indeterminate	rib/spine		5	fragme	23
-21.6E-204NL14	lm							indeterminate	indeterminate		19	fragme	26
-21.6E-204NL14	Osteichthyes					fish		fused	vert		1	comple	0
-21.6E-204NL14	mm							indeterminate	long bone		46	fragme	16
-21.6E-204NL14	mm							indeterminate	rib/spine		14	fragme	3
-21.6E-204NL14	mm							indeterminate	indeterminate		8	fragme	4
-21.6E-204NL14	unident							indeterminate	indeterminate			fragme	38
-21.6E-204NL14	lm							indeterminate	long bone		6	fragme	9
-21.6E-204NL14	lm							indeterminate	skull		1	fragme	1
-21.6E-204NL14	lm							indeterminate	indeterminate		2	fragme	2
-21.6E-204NL14	mm							indeterminate	long bone		5	fragme	1
-21.6E-204NL14	unident							indeterminate	indeterminate			fragme	0
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	1st phalanx	right	1	comple	19
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2nd phalanx	right	1	comple	10
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	fused	1st phalanx	right	1	<1/4	3
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	1st phalanx	left	1	1/2	7
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	fused	1st phalanx	left	1	1/4	3
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae			L bovid		fused	mandible w/ molar		1	fragme	62
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	atlas		2	1/4	27
-21.6E-204NL15	lm						Distal	fused	femur		1	1/4	31
-21.6E-204NL15	lm							fused	acetabulum		1	1/2	14
-21.6E-204NL15	lm						Distal	fused	humerus		1	1/4	16
-21.6E-204NL15	lm							fused	occipital		1	fragme	14
-21.6E-204NL15	lm							fused	scapula		8	fragme	19

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL14		scapula	
-21.6E-204NL14		phalanx	
-21.6E-204NL14		accessory carpal	
-21.6E-204NL14		scapula	
-21.6E-204NL14		phalanx	
-21.6E-204NL14	L artiodactyl	metapodial	
-21.6E-204NL14		tooth	
-21.6E-204NL14		skull	pc=4
-21.6E-204NL14		skull	b=6
-21.6E-204NL14		long bone	b=1
-21.6E-204NL14		rib/spine	
-21.6E-204NL14		indeterminate	b=3, cut=1
-21.6E-204NL14	fish	vert	diam = 4.91
-21.6E-204NL14		long bone	b=1
-21.6E-204NL14		rib/spine	b=2, c=1
-21.6E-204NL14		indeterminate	c=2
-21.6E-204NL14		indeterminate	
-21.6E-204NL14		long bone	c=2
-21.6E-204NL14		skull	b=1
-21.6E-204NL14		indeterminate	b=1
-21.6E-204NL14		long bone	b=2
-21.6E-204NL14		indeterminate	
-21.6E-204NL15	zebu	1st phalanx	GLPe 59.04 Bp 27.0 Bd 25.71
-21.6E-204NL15	zebu	2nd phalanx	GL 38.82 Bp 25.75 Bd 23.31
-21.6E-204NL15	zebu	1st phalanx	
-21.6E-204NL15	zebu	1st phalanx	GL 61.31
-21.6E-204NL15	zebu	1st phalanx	
-21.6E-204NL15	L bovid	mandible w/ r	dev=subadult, unworn molar
-21.6E-204NL15	zebu/buffalo	atlas	
-21.6E-204NL15		femur	lateral epicondyle
-21.6E-204NL15		acetabulum	
-21.6E-204NL15		humerus	distal trochlea
-21.6E-204NL15		occipital	
-21.6E-204NL15		scapula	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMP	grams
-21.6E-204NL15	lm							fused	petris temporal		2	fragme	11
-21.6E-204NL15	lm							indeterminate	vert		3	fragme	14
-21.6E-204NL15	lm							indeterminate	long bone		27	fragme	69
-21.6E-204NL15	lm							indeterminate	rib/spine		25	fragme	98
-21.6E-204NL15	lm							indeterminate	skull		26	fragme	95
-21.6E-204NL15	lm							indeterminate	indeterminate		26	fragme	41
-21.6E-204NL15	Mammalia								tooth		66	fragme	48
-21.6E-204NL15	Osteichthyes					fish		fused	vert		1	fragme	4
-21.6E-204NL15	Aves					bird		indeterminate	long bone		1	fragme	0
-21.6E-204NL15	mm							indeterminate	long bone		178	fragme	43
-21.6E-204NL15	mm							indeterminate	rib/spine		25	fragme	15
-21.6E-204NL15	mm							indeterminate	skull		29	fragme	16
-21.6E-204NL15	mm							indeterminate	indeterminate		73	fragme	28
-21.6E-204NL15	unident							indeterminate	indeterminate			fragme	47
-21.6E-204NL15	unident							indeterminate	indeterminate			fragme	96
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2nd phalanx		1	comple	11
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	mandible	left	1	fragme	42
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	molar	upper	1	comple	38
-21.6E-204NL15	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	molar		2	fragme	15
-21.6E-204NL15	lm							fused	costal cartilage		3	fragme	5
-21.6E-204NL15	mm							fused	costal cartilage		2	fragme	0
-21.6E-204NL15	lm							fused	scapula		1	1/4	30
-21.6E-204NL15	lm/mm							fused	scapula		6	fragme	3
-21.6E-204NL15	lm						Distal	fused	phalanx		1	<1/4	7
-21.6E-204NL15	Mammalia								tooth		34	fragme	24
-21.6E-204NL15	mm						epiphy	unfused	vert		1	fragme	1
-21.6E-204NL15	mm							fused	petris temporal		1	fragme	1
-21.6E-204NL15	lm							indeterminate	skull		19	fragme	62
-21.6E-204NL15	lm							indeterminate	long bone		29	fragme	43
-21.6E-204NL15	lm							indeterminate	indeterminate		18	fragme	38
-21.6E-204NL15	lm							indeterminate	rib/spine		6	fragme	35
-21.6E-204NL15	mm							indeterminate	long bone		188	fragme	66
-21.6E-204NL15	mm							indeterminate	rib/spine		37	fragme	26
-21.6E-204NL15	mm							indeterminate	skull		38	fragme	23

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL15		petris temporal	
-21.6E-204NL15		vert	
-21.6E-204NL15		long bone	b=2
-21.6E-204NL15		rib/spine	b=4
-21.6E-204NL15		skull	
-21.6E-204NL15		indeterminate	b=1
-21.6E-204NL15		tooth	
-21.6E-204NL15	fish	vert	diam = 23.94
-21.6E-204NL15	bird	long bone	
-21.6E-204NL15		long bone	b=4
-21.6E-204NL15		rib/spine	pc=1
-21.6E-204NL15		skull	
-21.6E-204NL15		indeterminate	
-21.6E-204NL15		indeterminate	
-21.6E-204NL15		indeterminate	
-21.6E-204NL15	zebu	2nd phalanx	b=1, GL 38.61 Bp 25.64 Bd 22.85
-21.6E-204NL15	zebu/buffalo	mandible	
-21.6E-204NL15	zebu/buffalo	molar	dev=adult
-21.6E-204NL15	zebu/buffalo	molar	
-21.6E-204NL15		costal cartilage	
-21.6E-204NL15		costal cartilage	
-21.6E-204NL15		scapula	
-21.6E-204NL15		scapula	
-21.6E-204NL15		phalanx	pc=1
-21.6E-204NL15		tooth	
-21.6E-204NL15		vert	
-21.6E-204NL15		petris temporal	
-21.6E-204NL15		skull	b=2
-21.6E-204NL15		long bone	b=6, c=3
-21.6E-204NL15		indeterminate	b=1, c=4
-21.6E-204NL15		rib/spine	
-21.6E-204NL15		long bone	b=16, c=16
-21.6E-204NL15		rib/spine	b=1, c=2
-21.6E-204NL15		skull	b=3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL15	mm							indeterminate	indeterminate		60	fragme	27
-21.6E-204NL15	Osteichthyes					fish		indeterminate	indeterminate		2	fragme	1
-21.6E-204NL16	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	metacarpal		1	1/4	41
-21.6E-204NL16	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2nd phalanx		1	comple	11
-21.6E-204NL16	lm						Distal	fused	phalanx		1	1/4	5
-21.6E-204NL16	lm							fused	calcaneus		1	<1/4	6
-21.6E-204NL16	lm						epiphy	unfused	vert		1	fragme	4
-21.6E-204NL16	lm/mm							fused	scapula		5	fragme	3
-21.6E-204NL16	mm							fused	costal cartilage		2	fragme	0
-21.6E-204NL16	Mammalia								tooth		6	fragme	2
-21.6E-204NL16	lm							indeterminate	long bone		11	fragme	14
-21.6E-204NL16	lm							indeterminate	rib/spine		2	fragme	7
-21.6E-204NL16	lm							indeterminate	vert		7	fragme	16
-21.6E-204NL16	mm							indeterminate	long bone		54	fragme	16
-21.6E-204NL16	mm							indeterminate	rib/spine		17	fragme	6
-21.6E-204NL16	mm							indeterminate	indeterminate		19	fragme	8
-21.6E-204NL16	mm							indeterminate	skull		7	fragme	6
-21.6E-204NL16	Reptilia					reptile		indeterminate	skull		1	fragme	0
-21.6E-204NL16	sm							indeterminate	long bone		1	fragme	0
-21.6E-204NL16	unident							indeterminate	indeterminate			fragme	30
-21.6E-204NL17	Mammalia	Artiodactyla				L ruminant		fused	mandible	right	1	fragme	60
-21.6E-204NL17	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	1st phalanx	right	1	1/4	6
-21.6E-204NL17	lm						Proxim	indeterminate	radius	left	1	1/4	50
-21.6E-204NL17	lm							fused	sesamoid		1	comple	2
-21.6E-204NL17	Mammalia							fused	antler		1	fragme	0
-21.6E-204NL17	Reptilia	Sauria				lizard		fused	vert		1	comple	0
-21.6E-204NL17	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	dorsal spine		1	comple	0
-21.6E-204NL17	Osteichthyes					fish		fused	cleithrum		1	fragme	0
-21.6E-204NL17	Osteichthyes					fish		indeterminate	indeterminate		3	fragme	1
-21.6E-204NL17	Mammalia								tooth		83	fragme	67
-21.6E-204NL17	lm							indeterminate	skull		9	fragme	19
-21.6E-204NL17	lm							indeterminate	indeterminate		13	fragme	33
-21.6E-204NL17	lm							indeterminate	long bone		33	fragme	60
-21.6E-204NL17	lm							indeterminate	rib/spine		27	fragme	72

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL15		indeterminate	b=2, c=4
-21.6E-204NL15	fish	indeterminate	
-21.6E-204NL16	zebu	metacarpal	Bd 54.15
-21.6E-204NL16	zebu	2nd phalanx	GL 39.15 Bp 25.29 Bd 23.13
-21.6E-204NL16		phalanx	
-21.6E-204NL16		calcaneus	
-21.6E-204NL16		vert	
-21.6E-204NL16		scapula	
-21.6E-204NL16		costal cartilage	
-21.6E-204NL16		tooth	
-21.6E-204NL16		long bone	
-21.6E-204NL16		rib/spine	
-21.6E-204NL16		vert	
-21.6E-204NL16		long bone	b=1, c=1
-21.6E-204NL16		rib/spine	b=1, c=1
-21.6E-204NL16		indeterminate	
-21.6E-204NL16		skull	
-21.6E-204NL16	reptile	skull	
-21.6E-204NL16		long bone	
-21.6E-204NL16		indeterminate	
-21.6E-204NL17	L ruminant	mandible	
-21.6E-204NL17	zebu/buffalo	1st phalanx	
-21.6E-204NL17		radius	
-21.6E-204NL17		sesamoid	
-21.6E-204NL17		antler	
-21.6E-204NL17	lizard	vert	
-21.6E-204NL17	catfish	dorsal spine	
-21.6E-204NL17	fish	cleithrum	
-21.6E-204NL17	fish	indeterminate	
-21.6E-204NL17		tooth	
-21.6E-204NL17		skull	
-21.6E-204NL17		indeterminate	b=3, pc=2
-21.6E-204NL17		long bone	b=5, c=1
-21.6E-204NL17		rib/spine	cut=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-204NL17	mm							indeterminate	long bone		204	fragme	89
-21.6E-204NL17	mm							indeterminate	rib/spine		116	fragme	50
-21.6E-204NL17	mm							indeterminate	skull		25	fragme	13
-21.6E-204NL17	mm							indeterminate	indeterminate		66	fragme	26
-21.6E-204NL17	Aves					bird		indeterminate	skull		2	fragme	0
-21.6E-204NL17	Aves					bird		indeterminate	indeterminate		1	fragme	1
-21.6E-204NL17	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	astragalus	right	1	comple	33
-21.6E-204NL17	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	calcaneus	left	1	1/2	22
-21.6E-204NL17	Mammalia	Artiodactyla	Cervidae	Cervus	unicolor	sambar		fused	3rd Phalanx	right	1	comple	6
-21.6E-204NL17	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory carpal		1	comple	2
-21.6E-204NL17	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metapodial		1	<1/4	1
-21.6E-204NL17	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		6	fragme	11
-21.6E-204NL17	Mammalia								antler		2	fragme	5
-21.6E-204NL17	sm							fused	phalanx		1	comple	0
-21.6E-204NL17	mm							fused	costal cartilage		1	fragme	1
-21.6E-204NL17	Mammalia								tooth		42	fragme	42
-21.6E-204NL17	lm							indeterminate	occipital		1	fragme	18
-21.6E-204NL17	lm						centrur	unfused	vert		1	fragme	18
-21.6E-204NL17	mm							fused	vert		1	<1/4	1
-21.6E-204NL17	Osteichthyes					fish		fused	vert		2	comple	0
-21.6E-204NL17	lm							indeterminate	mandible		3	fragme	8
-21.6E-204NL17	lm							indeterminate	skull		16	fragme	29
-21.6E-204NL17	lm							indeterminate	long bone		50	fragme	82
-21.6E-204NL17	lm							indeterminate	rib/spine		55	fragme	106
-21.6E-204NL17	lm							indeterminate	rib		1	fragme	17
-21.6E-204NL17	lm							indeterminate	indeterminate		12	fragme	19
-21.6E-204NL17	mm							indeterminate	long bone		122	fragme	46
-21.6E-204NL17	mm							indeterminate	rib/spine		45	fragme	13
-21.6E-204NL17	mm							indeterminate	skull		15	fragme	8
-21.6E-204NL17	mm							indeterminate	indeterminate		31	fragme	18
-21.6E-204NL17	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		5	fragme	3
-21.6E-204NL17	unident							indeterminate	indeterminate			fragme	126
-21.6E-204NL17	lm						Proxim	indeterminate	tibia		1	1/4	22
-21.6E-204NL17	Mammalia	Artiodactyla				L artiodactyl	Distal e	unfused	metapodial		1	comple	11

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL17		long bone	b=16, c=5
-21.6E-204NL17		rib/spine	b=3
-21.6E-204NL17		skull	
-21.6E-204NL17		indeterminate	b=5, c=2
-21.6E-204NL17	bird	skull	
-21.6E-204NL17	bird	indeterminate	
-21.6E-204NL17	zebu	astragalus	D1 33.99 Bd 36.56 GL1 58.29 GLm 54.03
-21.6E-204NL17	zebu	calcaneus	
-21.6E-204NL17	sambar	3rd Phalanx	DLS 50.31 Ld 41.21 MBS 11.87
-21.6E-204NL17	zebu/buffalo	accessory carpal	
-21.6E-204NL17	L artiodactyl	metapodial	
-21.6E-204NL17	zebu/buffalo	horn core	
-21.6E-204NL17		antler	
-21.6E-204NL17		phalanx	
-21.6E-204NL17		costal cartilage	
-21.6E-204NL17		tooth	
-21.6E-204NL17		occipital	
-21.6E-204NL17		vert	
-21.6E-204NL17		vert	
-21.6E-204NL17	fish	vert	diam = 4.25
-21.6E-204NL17		mandible	
-21.6E-204NL17		skull	
-21.6E-204NL17		long bone	b=1, pc=1
-21.6E-204NL17		rib/spine	
-21.6E-204NL17		rib	
-21.6E-204NL17		indeterminate	pc=1
-21.6E-204NL17		long bone	b=17, c=2
-21.6E-204NL17		rib/spine	b=1
-21.6E-204NL17		skull	
-21.6E-204NL17		indeterminate	b=1, c=1
-21.6E-204NL17	bird/reptile	indeterminate	
-21.6E-204NL17		indeterminate	
-21.6E-204NL17		tibia	
-21.6E-204NL17	L artiodactyl	metapodial	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-204NL17	lm							indeterminate	3rd Phalanx		1	1/2	?
-21.6E-204NL17	lm/mm							indeterminate	ilium		1	fragme	29
-21.6E-204NL17	lm/mm							indeterminate	innominate		5	fragme	23
-21.6E-204NL17	lm							fused	sesamoid		2	comple	2
-21.6E-204NL17	lm/mm							unfused	carpal/tarsal		1	fragme	0
-21.6E-204NL17	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	0
-21.6E-204NL17	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		7	fragme	12
-21.6E-204NL17	Mammalia								antler		3	fragme	2
-21.6E-204NL17	lm							fused	costal cartilage		1	fragme	2
-21.6E-204NL17	mm							fused	costal cartilage		4	fragme	2
-21.6E-204NL17	lm							fused	petris temporal		2	fragme	12
-21.6E-204NL17	lm/mm							fused	petris temporal		3	fragme	4
-21.6E-204NL17	Mammalia								tooth		13	fragme	13
-21.6E-204NL17	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	0
-21.6E-204NL17	Osteichthyes					fish		fused	vert		5	comple	0
-21.6E-204NL17	sm							fused	femur		1	1/2	0
-21.6E-204NL17	sm							indeterminate	long bone		3	fragme	0
-21.6E-204NL17	lm							indeterminate	skull		23	fragme	44
-21.6E-204NL17	lm							indeterminate	mandible		2	fragme	12
-21.6E-204NL17	lm							indeterminate	long bone		46	fragme	68
-21.6E-204NL17	lm							indeterminate	rib/spine		40	fragme	69
-21.6E-204NL17	lm							indeterminate	rib		2	fragme	27
-21.6E-204NL17	lm							indeterminate	indeterminate		31	fragme	33
-21.6E-204NL17	lm/mm						epiphys	unfused	vert		2	fragme	1
-21.6E-204NL17	mm							indeterminate	long bone		159	fragme	65
-21.6E-204NL17	mm							indeterminate	rib/spine		68	fragme	26
-21.6E-204NL17	mm							indeterminate	skull		7	fragme	3
-21.6E-204NL17	mm							indeterminate	indeterminate		25	fragme	11
-21.6E-204NL17	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		7	fragme	2
-21.6E-204NL17	unident							indeterminate	indeterminate			fragme	186
-21.6E-204NL17	lm/mm							indeterminate	long bone		13	fragme	4
-21.6E-204NL17	lm/mm							indeterminate	indeterminate		5	fragme	1
-21.6E-204NL17	lm							indeterminate	rib/spine		1	fragme	0
-21.6E-204NL17	mm							indeterminate	long bone		8	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL17		3rd Phalanx	
-21.6E-204NL17		ilium	
-21.6E-204NL17		innominate	
-21.6E-204NL17		sesamoid	
-21.6E-204NL17		carpal/tarsal	
-21.6E-204NL17	L artiodactyl	metapodial	
-21.6E-204NL17	zebu/buffalo	horn core	
-21.6E-204NL17		antler	
-21.6E-204NL17		costal cartilage	
-21.6E-204NL17		costal cartilage	
-21.6E-204NL17		petris temporal	
-21.6E-204NL17		petris temporal	
-21.6E-204NL17		tooth	
-21.6E-204NL17	softshell turtle	carapace	
-21.6E-204NL17	fish	vert	diam = 6.2, 5.44
-21.6E-204NL17		femur	
-21.6E-204NL17		long bone	
-21.6E-204NL17		skull	
-21.6E-204NL17		mandible	
-21.6E-204NL17		long bone	cut=1
-21.6E-204NL17		rib/spine	
-21.6E-204NL17		rib	
-21.6E-204NL17		indeterminate	b=3
-21.6E-204NL17		vert	
-21.6E-204NL17		long bone	b=4
-21.6E-204NL17		rib/spine	b=1, pc=1
-21.6E-204NL17		skull	b=1
-21.6E-204NL17		indeterminate	b=1, c=1
-21.6E-204NL17	bird/reptile	indeterminate	b=1
-21.6E-204NL17		indeterminate	
-21.6E-204NL17		long bone	b=5
-21.6E-204NL17		indeterminate	b=1, pc=1
-21.6E-204NL17		rib/spine	
-21.6E-204NL17		long bone	b=4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL17	unident							indeterminate	indeterminate			fragme	117
-21.6E-204NL18	unident							indeterminate	indeterminate			fragme	1068
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo	Distal	fused	scapula	left	1	1/2	71
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	radius	left	1	3/4	71
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	radius	right	1	3/4	76
-21.6E-204NL18	Mammalia	Artiodactyla	Cervidae	Cervus	unicolor	sambar	Distal	fused	humerus	right	1	1/2	46
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	humerus	right	1	1/2	76
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	metatarsal	left	1	1/2	55
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	metacarpal		1	1/2	42
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	central tarsal	left	1	comple	35
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo		fused	central tarsal	left	1	comple	36
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	central tarsal	left	1	1/2	17
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	central tarsal	right	2	3/4	32
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	calcaneus	left	3	1/2	51
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	calcaneus	right	1	1/2	68
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	astragalus	right	2	3/4	52
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	astragalus	left	1	comple	46
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	astragalus	left	1	3/4	39
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	astragalus	left	1	3/4	39
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Lateral Malle	right	1	comple	8
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Lateral Malle	left	3	comple	24
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	tibia	left	1	3/4	93
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	tibia	left	1	1/2	49
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	tarsal 2/3		2	comple	12
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fusing	femur		1	3/4	159
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	unfused	tibia	left	1	comple	43
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo		fused	sacrum		1	3/4	52
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	right	1	comple	16
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	left	1	3/4	11
-21.6E-204NL18	Mammalia	Artiodactyla	Cervidae	Cervus	unicolor	sambar		fused	2nd phalanx	left	1	comple	11
-21.6E-204NL18	Mammalia	Artiodactyla	Cervidae	Cervus	unicolor	sambar		fused	2nd phalanx	right	1	1/4	4
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	1st phalanx	left	1	3/4	12
-21.6E-204NL18	lm						Proxim	indeterminate	1st phalanx	right	1	1/4	4
-21.6E-204NL18	lm						Proxim	indeterminate	1st phalanx		1	<1/4	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL17		indeterminate	
-21.6E-204NL18		indeterminate	
-21.6E-204NL18	buffalo	scapula	hack=1
-21.6E-204NL18	zebu/buffalo	radius	Bd 57.04
-21.6E-204NL18	zebu/buffalo	radius	
-21.6E-204NL18	sambar	humerus	
-21.6E-204NL18	zebu/buffalo	humerus	
-21.6E-204NL18	zebu/buffalo	metatarsal	Bd 52.55
-21.6E-204NL18	zebu/buffalo	metacarpal	Bd 49.36
-21.6E-204NL18	zebu	central tarsal	GB 57.14
-21.6E-204NL18	buffalo	central tarsal	GB 57.14
-21.6E-204NL18	zebu/buffalo	central tarsal	
-21.6E-204NL18	zebu	central tarsal	GB 49.55, 45.47
-21.6E-204NL18	zebu/buffalo	calcaneus	
-21.6E-204NL18	zebu/buffalo	calcaneus	
-21.6E-204NL18	zebu/buffalo	astragalus	GLm 59.2, Bd 40.93
-21.6E-204NL18	zebu/buffalo	astragalus	GL1 72.87, Glm 67.44, D1 40.37, Bd 47.22
-21.6E-204NL18	zebu/buffalo	astragalus	GLm 62.18, D1 34.12, Bd 39.47
-21.6E-204NL18	zebu/buffalo	astragalus	Bd 37.51
-21.6E-204NL18	zebu/buffalo	Lateral Malleolus	
-21.6E-204NL18	zebu/buffalo	Lateral Malleolus	
-21.6E-204NL18	zebu	tibia	sf=1, Bd 59.45, had articulating astrag and lat mal
-21.6E-204NL18	zebu	tibia	Bd 69.54, had articulating astrag and lat mal
-21.6E-204NL18	zebu/buffalo	tarsal 2/3	
-21.6E-204NL18	zebu/buffalo	femur	DC 48.84
-21.6E-204NL18	zebu/buffalo	tibia	
-21.6E-204NL18	buffalo	sacrum	sex indeterminate
-21.6E-204NL18	zebu/buffalo	2nd phalanx	GL 45.29, Bp 31.78, Bd 29.34
-21.6E-204NL18	zebu/buffalo	2nd phalanx	Bd 26.13
-21.6E-204NL18	sambar	2nd phalanx	GL 43.17, Bp 21.34, Bd 15.63
-21.6E-204NL18	sambar	2nd phalanx	Bd 15.38
-21.6E-204NL18	zebu/buffalo	1st phalanx	Bd 21.27
-21.6E-204NL18		1st phalanx	
-21.6E-204NL18		1st phalanx	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-204NL18	lm						Distal	indeterminate	phalanx		1	<1/4	2
-21.6E-204NL18	lm							indeterminate	carpal/tarsal		3	fragme	8
-21.6E-204NL18	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		3	fragme	8
-21.6E-204NL18	lm						Proxim	indeterminate	calcaneus	right	1	fragme	8
-21.6E-204NL18	mm							indeterminate	mandible		1	<1/4	4
-21.6E-204NL18	lm							indeterminate	skull		50	fragme	55
-21.6E-204NL18	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	3
-21.6E-204NL18	Reptilia	Testudines				turtle		fused	carapace		2	fragme	2
-21.6E-204NL18	Aves					bird		indeterminate	long bone		2	fragme	2
-21.6E-204NL18	Osteichthyes					fish		fused	vert		4	comple	1
-21.6E-204NL18	Reptilia	Testudines				turtle		fused	vert		1	1/4	0
-21.6E-204NL18	Osteichthyes					fish		indeterminate	indeterminate		2	fragme	1
-21.6E-204NL18	Aves					M bird		indeterminate	ulna		1	1/2	1
-21.6E-204NL18	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		8	fragme	7
-21.6E-204NL18	mm							indeterminate	petris temporal		2	fragme	1
-21.6E-204NL18	mm							fused	sesamoid		6	comple	5
-21.6E-204NL18	mm							indeterminate	scapula		2	fragme	3
-21.6E-204NL18	mm							fused	costal cartilage		4	fragme	1
-21.6E-204NL18	Mammalia								antler		3	fragme	4
-21.6E-204NL18	lm/mm							indeterminate	scapula		2	fragme	12
-21.6E-204NL18	lm/mm							indeterminate	ilium		10	fragme	58
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo		fused	maxilla	right	1	1/2	127
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo			M3	upper	1	complete	
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo			M2	upper	1	complete	
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo			M1	upper	1	complete	
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo			P4	upper	1	complete	
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	maxilla	right	1	1/4	44
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			M1	upper	1	complete	
-21.6E-204NL18	Mammalia								tooth		37	fragme	29
-21.6E-204NL18	Mammalia	Artiodactyla	Cervidae			L deer			molar	lower	1	3/4	10
-21.6E-204NL18	Mammalia	Artiodactyla	Cervidae			L deer			molar	lower	1	1/2	6
-21.6E-204NL18	lm							indeterminate	vert, thoracic		2	1/2	90
-21.6E-204NL18	lm							unfused	vert, thoracic		1	1/4	21
-21.6E-204NL18	lm						spine	indeterminate	vert, thoracic		2	fragme	19

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL18		phalanx	
-21.6E-204NL18		carpal/tarsal	
-21.6E-204NL18	L artiodactyl	metapodial	
-21.6E-204NL18		calcaneus	
-21.6E-204NL18		mandible	
-21.6E-204NL18		skull	
-21.6E-204NL18	softshell turtle	carapace	
-21.6E-204NL18	turtle	carapace	
-21.6E-204NL18	bird	long bone	
-21.6E-204NL18	fish	vert	diam = 12.83, 5.6
-21.6E-204NL18	turtle	vert	
-21.6E-204NL18	fish	indeterminate	
-21.6E-204NL18	M bird	ulna	
-21.6E-204NL18	bird/reptile	indeterminate	
-21.6E-204NL18		petris temporal	
-21.6E-204NL18		sesamoid	
-21.6E-204NL18		scapula	
-21.6E-204NL18		costal cartilage	
-21.6E-204NL18		antler	
-21.6E-204NL18		scapula	
-21.6E-204NL18		ilium	
-21.6E-204NL18	buffalo	maxilla	w/ M3 - P4, L molar row = 80.02
-21.6E-204NL18	buffalo	M3	dev=k
-21.6E-204NL18	buffalo	M2	dev=k
-21.6E-204NL18	buffalo	M1	dev=k
-21.6E-204NL18	buffalo	P4	dev=g
-21.6E-204NL18	zebu/buffalo	maxilla	w/ M1 and P4 (broken)
-21.6E-204NL18	zebu/buffalo	M1	dev=k
-21.6E-204NL18		tooth	
-21.6E-204NL18	L deer	molar	dev=g
-21.6E-204NL18	L deer	molar	dev=d
-21.6E-204NL18		vert, thoracic	
-21.6E-204NL18		vert, thoracic	
-21.6E-204NL18		vert, thoracic	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL18	mm							indeterminate	vert, lumbar		1	1/4	3
-21.6E-204NL18	lm							indeterminate	palatine		1	fragme	26
-21.6E-204NL18	lm							indeterminate	vert		22	fragme	133
-21.6E-204NL18	mm							indeterminate	vert		5	fragme	6
-21.6E-204NL18	lm							indeterminate	rib/spine		66	fragme	57
-21.6E-204NL18	lm							indeterminate	rib		5	fragme	21
-21.6E-204NL18	mm							indeterminate	rib/spine		6	fragme	1
-21.6E-204NL18	lm							indeterminate	long bone		467	fragme	498
-21.6E-204NL18	mm							indeterminate	long bone		7	fragme	2
-21.6E-204NL18	lm							indeterminate	indeterminate		176	fragme	366
-21.6E-204NL18	mm							indeterminate	indeterminate		96	fragme	71
-21.6E-204NL18	lm						Distal	unfused	humerus	right	1	1/4	71
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	left	1	comple	16
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	1st phalanx	left	1	comple	17
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx	right	1	1/4	6
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	1st phalanx	right	1	3/4	24
-21.6E-204NL18	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	tibia	left	1	1/2	67
-21.6E-204NL18flot	Osteichthyes					fish		indeterminate	skull		2	fragme	0
-21.6E-204NL18flot	sm							indeterminate	rib/lb		11	fragme	0
-21.6E-204NL18flot	Mammalia								antler		6	fragme	3
-21.6E-204NL18flot	lm/mm							indeterminate	costal cartilage		1	fragme	0
-21.6E-204NL18flot	Mammalia	Artiodactyla				M artiodactyl		indeterminate	carpal 2/3		1	fragme	0
-21.6E-204NL18flot	lm							unfused	vert		3	fragme	3
-21.6E-204NL18flot	lm							indeterminate	vert		1	fragme	1
-21.6E-204NL18flot	Mammalia								tooth		1	fragme	0
-21.6E-204NL18flot	lm							indeterminate	skull		2	fragme	3
-21.6E-204NL18flot	lm							indeterminate	long bone		8	fragme	9
-21.6E-204NL18flot	lm							indeterminate	rib/spine		6	fragme	5
-21.6E-204NL18flot	lm							indeterminate	indeterminate		6	fragme	4
-21.6E-204NL18flot	mm							indeterminate	long bone		40	fragme	11
-21.6E-204NL18flot	mm							indeterminate	rib/spine		7	fragme	1
-21.6E-204NL18flot	mm							indeterminate	indeterminate		21	fragme	6
-21.6E-204NL18flot	unident							indeterminate	indeterminate			fragme	18
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	calcaneus	left	1	3/4	65

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL18		vert, lumbar	
-21.6E-204NL18		palatine	
-21.6E-204NL18		vert	
-21.6E-204NL18		vert	
-21.6E-204NL18		rib/spine	
-21.6E-204NL18		rib	
-21.6E-204NL18		rib/spine	
-21.6E-204NL18		long bone	
-21.6E-204NL18		long bone	
-21.6E-204NL18		indeterminate	
-21.6E-204NL18		indeterminate	
-21.6E-204NL18		humerus	
-21.6E-204NL18	zebu/buffalo	2nd phalanx	GL 42.10, Bp 28.10, Bd 23.17 *artic
-21.6E-204NL18	zebu/buffalo	1st phalanx	GLPe 58.13, Bp 27.96, Bd 25.89 *artic
-21.6E-204NL18	zebu/buffalo	3rd Phalanx	^artic
-21.6E-204NL18	zebu/buffalo	1st phalanx	Bp 32.25, Bd 24.90, GLPe 61.86
-21.6E-204NL18	zebu	tibia	hack=1, Bd 58.44
-21.6E-204NL18flot	fish	skull	
-21.6E-204NL18flot		rib/lb	
-21.6E-204NL18flot		antler	
-21.6E-204NL18flot		costal cartilage	
-21.6E-204NL18flot	M artiodactyl	carpal 2/3	
-21.6E-204NL18flot		vert	
-21.6E-204NL18flot		vert	
-21.6E-204NL18flot		tooth	
-21.6E-204NL18flot		skull	
-21.6E-204NL18flot		long bone	b=2
-21.6E-204NL18flot		rib/spine	b=2
-21.6E-204NL18flot		indeterminate	b=1
-21.6E-204NL18flot		long bone	b=1
-21.6E-204NL18flot		rib/spine	b=2
-21.6E-204NL18flot		indeterminate	
-21.6E-204NL18flot		indeterminate	
-21.6E-204NL19	zebu	calcaneus	pc=1, GB 60.15

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	right	1	comple	16
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx		1	1/4	
-21.6E-204NL19	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	1st phalanx	left	1	comple	6
-21.6E-204NL19	lm						Proxim	indeterminate	1st phalanx	left	1	1/4	4
-21.6E-204NL19	lm							indeterminate	3rd Phalanx		3	<1/4	5
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	metatarsal		1	<1/4	8
-21.6E-204NL19	lm							indeterminate	ulna		1	fragme	7
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		1	fragme	32
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	left	1	comple	16
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	right	1	comple	16
-21.6E-204NL19	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	3rd Phalanx	left	1	3/4	3
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx		1	1/2	8
-21.6E-204NL19	lm							fused	3rd Phalanx		3	1/4	4
-21.6E-204NL19	lm						Distal	fused	phalanx		2	<1/4	3
-21.6E-204NL19	Osteichthyes					fish		fused	vert		3	comple	0
-21.6E-204NL19	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	0
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	intermediate (	right	1	comple	5
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory ca	right	1	comple	2
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory ca	left	1	3/4	2
-21.6E-204NL19	lm							fused	sesamoid		1	comple	1
-21.6E-204NL19	mm							fused	sesamoid		2	comple	1
-21.6E-204NL19	mm							fused	scapula		1	<1/4	0
-21.6E-204NL19	lm							unfused	long bone		1	fragme	1
-21.6E-204NL19	Mammalia	Artiodactyla				S artiodactyl	Proxim	fused	metapodial		1	<1/4	0
-21.6E-204NL19	Mammalia								antler		2	fragme	1
-21.6E-204NL19	lm							fused	petris temporal		1	fragme	12
-21.6E-204NL19	Reptilia					reptile		fused	vert		1	1/2	0
-21.6E-204NL19	Aves					bird		indeterminate	long bone		1	fragme	1
-21.6E-204NL19	lm							indeterminate	vert		5	fragme	22
-21.6E-204NL19	Mammalia								tooth		66	fragme	21
-21.6E-204NL19	lm							indeterminate	indeterminate		20	fragme	55
-21.6E-204NL19	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		4	fragme	1
-21.6E-204NL19	lm							indeterminate	long bone		68	fragme	162
-21.6E-204NL19	lm							indeterminate	rib/spine		30	fragme	26

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL19	zebu/buffalo	2nd phalanx	pc=1, GL 43.10, Bp 26.63, Bd 24.49
-21.6E-204NL19	zebu/buffalo	2nd phalanx	b=1
-21.6E-204NL19	pig	1st phalanx	pc=1, GLPe 37.31, Bp 16.97, Bd 15.11
-21.6E-204NL19		1st phalanx	b=1
-21.6E-204NL19		3rd Phalanx	pc=1
-21.6E-204NL19	zebu/buffalo	metatarsal	pc=1
-21.6E-204NL19		ulna	pc=1, semilunar facet
-21.6E-204NL19	zebu/buffalo	horn core	b=1
-21.6E-204NL19	zebu/buffalo	2nd phalanx	pc=1, GL 46.81, Bp 29.91, Bd 26.98
-21.6E-204NL19	zebu/buffalo	2nd phalanx	pc=1, GL 46.06, Bp 27.24, Bd 22.97 ^artic
-21.6E-204NL19	pig	3rd Phalanx	MBS 9.65
-21.6E-204NL19	zebu/buffalo	3rd Phalanx	
-21.6E-204NL19		3rd Phalanx	pc=2
-21.6E-204NL19		phalanx	
-21.6E-204NL19	fish	vert	diam = 4.96
-21.6E-204NL19	softshell turtle	carapace	
-21.6E-204NL19	zebu/buffalo	intermediate	b=1
-21.6E-204NL19	zebu/buffalo	accessory ca	pc=1
-21.6E-204NL19	zebu/buffalo	accessory ca	pc=1
-21.6E-204NL19		sesamoid	
-21.6E-204NL19		sesamoid	
-21.6E-204NL19		scapula	b=1
-21.6E-204NL19		long bone	dev=fetal/newborn
-21.6E-204NL19	S artiodactyl	metapodial	
-21.6E-204NL19		antler	
-21.6E-204NL19		petris tempor	b=1
-21.6E-204NL19	reptile	vert	
-21.6E-204NL19	bird	long bone	
-21.6E-204NL19		vert	pc=2
-21.6E-204NL19		tooth	b=6
-21.6E-204NL19		indeterminate	b=9
-21.6E-204NL19	bird/reptile	indeterminate	
-21.6E-204NL19		long bone	b=17, pc=13
-21.6E-204NL19		rib/spine	b=12, pc=3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-204NL19	mm							indeterminate	long bone		238	fragme	84
-21.6E-204NL19	mm							indeterminate	rib/spine		115	fragme	32
-21.6E-204NL19	mm							indeterminate	skull		18	fragme	10
-21.6E-204NL19	mm							indeterminate	indeterminate		128	fragme	60
-21.6E-204NL19	unident							indeterminate	indeterminate			fragme	256
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bosephalus	tragocamel	nilgai		fused	1st phalanx	right	1	comple	16
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	1st phalanx	left	1	3/4	16
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	2nd phalanx		1	1/2	4
-21.6E-204NL19	lm							fused	astragalus		3	1/4	24
-21.6E-204NL19	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	fragme	13
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	tibia	right	1	1/4	16
-21.6E-204NL19	lm							fused	vert, lumbar		1	fragme	24
-21.6E-204NL19	lm							unfused	vert, lumbar		1	fragme	23
-21.6E-204NL19	lm							indeterminate	vert		4	fragme	19
-21.6E-204NL19	mm							indeterminate	scapula		1	1/2	3
-21.6E-204NL19	lm							fused	carpal/tarsal		1	fragme	4
-21.6E-204NL19	lm							fused	sesamoid		1	comple	3
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx		1	1/4	8
-21.6E-204NL19	lm								molar		1	1/2	12
-21.6E-204NL19	lm/mm							indeterminate	scapula		1	1/4	11
-21.6E-204NL19	lm							indeterminate	skull		4	fragme	21
-21.6E-204NL19	lm							indeterminate	long bone		31	fragme	171
-21.6E-204NL19	lm							indeterminate	rib/spine		9	fragme	27
-21.6E-204NL19	lm							indeterminate	indeterminate		56	fragme	174
-21.6E-204NL19	Mammalia	Carnivora	Canidae			L canid		fused	1st phalanx		1	3/4	2
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2nd phalanx	right	1	comple	13
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	intermediate	left	1	comple	14
-21.6E-204NL19	mm							indeterminate	3rd Phalanx		1	1/4	5
-21.6E-204NL19	Osteichthyes					fish		fused	vert		2	comple	0
-21.6E-204NL19	Aves					bird		indeterminate	long bone		2	fragme	3
-21.6E-204NL19	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metapodial		3	fragme	19
-21.6E-204NL19	lm							indeterminate	carpal/tarsal		3	1/4	7
-21.6E-204NL19	lm							fused	sesamoid		1	comple	2
-21.6E-204NL19	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		2	1/4	12

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL19		long bone	b=50, pc=6
-21.6E-204NL19		rib/spine	b=56, pc=7, c=1
-21.6E-204NL19		skull	b=4, pc=2
-21.6E-204NL19		indeterminate	b=30, pc=12
-21.6E-204NL19		indeterminate	
-21.6E-204NL19	nilgai	1st phalanx	GLPe 66.87 Bp 19.45 Bd 19.76
-21.6E-204NL19	zebu	1st phalanx	Bp 29.70
-21.6E-204NL19	zebu/buffalo	2nd phalanx	Bp 23.11
-21.6E-204NL19		astragalus	pc=1
-21.6E-204NL19	L artiodactyl	metapodial	pc=1
-21.6E-204NL19	zebu/buffalo	tibia	
-21.6E-204NL19		vert, lumbar	
-21.6E-204NL19		vert, lumbar	
-21.6E-204NL19		vert	b=1
-21.6E-204NL19		scapula	
-21.6E-204NL19		carpal/tarsal	
-21.6E-204NL19		sesamoid	
-21.6E-204NL19	zebu/buffalo	3rd Phalanx	
-21.6E-204NL19		molar	dev=adult, worn
-21.6E-204NL19		scapula	b=1
-21.6E-204NL19		skull	
-21.6E-204NL19		long bone	b=1, pc=9
-21.6E-204NL19		rib/spine	
-21.6E-204NL19		indeterminate	b=5, pc=17
-21.6E-204NL19	L canid	1st phalanx	GL 30.32 Bd 12.09
-21.6E-204NL19	zebu	2nd phalanx	GL 42.77 Bp 30.52 Bd 25.53
-21.6E-204NL19	zebu/buffalo	intermediate carpal	
-21.6E-204NL19		3rd Phalanx	
-21.6E-204NL19	fish	vert	diam = 5.4
-21.6E-204NL19	bird	long bone	
-21.6E-204NL19	L artiodactyl	metapodial	
-21.6E-204NL19		carpal/tarsal	
-21.6E-204NL19		sesamoid	
-21.6E-204NL19	L artiodactyl	metapodial	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL19	Mammalia								antler		1	fragme	0
-21.6E-204NL19	mm/sm							indeterminate	vert, caudal		1	fragme	0
-21.6E-204NL19	Mammalia								tooth		33	fragme	17
-21.6E-204NL19	lm							indeterminate	skull		9	fragme	20
-21.6E-204NL19	lm/mm							indeterminate	skull		7	fragme	4
-21.6E-204NL19	lm							indeterminate	mandible		1	<1/4	8
-21.6E-204NL19	lm							indeterminate	vert		4	fragme	16
-21.6E-204NL19	lm							unfused	vert		1	fragme	5
-21.6E-204NL19	mm							indeterminate	vert		3	fragme	3
-21.6E-204NL19	lm							indeterminate	long bone		138	fragme	190
-21.6E-204NL19	lm							indeterminate	rib/spine		40	fragme	54
-21.6E-204NL19	lm							indeterminate	indeterminate		77	fragme	131
-21.6E-204NL19	mm							indeterminate	long bone		97	fragme	37
-21.6E-204NL19	mm							indeterminate	rib/spine		56	fragme	21
-21.6E-204NL19	mm							indeterminate	mandible		1	<1/4	1
-21.6E-204NL19	mm							indeterminate	indeterminate		49	fragme	29
-21.6E-204NL19	unident							indeterminate	indeterminate			fragme	176
-21.6E-204NL19	Mammalia								antler		5	fragme	8
-21.6E-204NL19	lm							fused	sesamoid		2	comple	5
-21.6E-204NL19	lm							indeterminate	carpal/tarsal		5	fragme	8
-21.6E-204NL19	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		1	fragme	5
-21.6E-204NL19	lm						Proxim	unfused	calcaneus		1	fragme	1
-21.6E-204NL19	Aves	Anseriformes	Anatidae	Dendrocygna		Lesser Whist	Distal	fused	humerus		1	1/2	0
-21.6E-204NL19	Osteichthyes					fish		fused	vert		2	comple	0
-21.6E-204NL19	lm						Distal	indeterminate	phalanx		1	<1/4	1
-21.6E-204NL19	Mammalia								tooth		6	fragme	4
-21.6E-204NL19	lm/mm							fused	costal cartilage		1	fragme	1
-21.6E-204NL19	Mammalia	Artiodactyla				M artiodactyl	Distal	fused	metapodial		1	<1/4	0
-21.6E-204NL19	mm							indeterminate	scapula		1	<1/4	3
-21.6E-204NL19	lm							indeterminate	vert		7	fragme	16
-21.6E-204NL19	lm							unfused	vert		1	fragme	2
-21.6E-204NL19	mm							unfused	vert		1	fragme	1
-21.6E-204NL19	mm							indeterminate	vert		4	fragme	2
-21.6E-204NL19	lm							indeterminate	skull		12	fragme	17

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL19		antler	
-21.6E-204NL19		vert, caudal	b=1
-21.6E-204NL19		tooth	
-21.6E-204NL19		skull	
-21.6E-204NL19		skull	
-21.6E-204NL19		mandible	
-21.6E-204NL19		vert	b=1
-21.6E-204NL19		vert	
-21.6E-204NL19		vert	
-21.6E-204NL19		long bone	cut=1
-21.6E-204NL19		rib/spine	b=5, pc=7
-21.6E-204NL19		indeterminate	b=5, pc=10
-21.6E-204NL19		long bone	b=5, pc=6
-21.6E-204NL19		rib/spine	b=9, pc=6
-21.6E-204NL19		mandible	b=1
-21.6E-204NL19		indeterminate	b=7, pc=5
-21.6E-204NL19		indeterminate	
-21.6E-204NL19		antler	b=2
-21.6E-204NL19		sesamoid	
-21.6E-204NL19		carpal/tarsal	
-21.6E-204NL19	L artiodactyl	metapodial	
-21.6E-204NL19		calcaneus	
-21.6E-204NL19	Lesser Whistlir	humerus	
-21.6E-204NL19	fish	vert	diam = 5.36
-21.6E-204NL19		phalanx	pc=1
-21.6E-204NL19		tooth	
-21.6E-204NL19		costal cartilage	
-21.6E-204NL19	M artiodactyl	metapodial	pc=1
-21.6E-204NL19		scapula	pc=1
-21.6E-204NL19		vert	b=2, pc=1
-21.6E-204NL19		vert	b=1
-21.6E-204NL19		vert	b=1
-21.6E-204NL19		vert	pc=3
-21.6E-204NL19		skull	b=5

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL19	lm/mm							indeterminate	skull		20	fragme	11
-21.6E-204NL19	lm							indeterminate	long bone		116	fragme	193
-21.6E-204NL19	lm							indeterminate	rib/spine		58	fragme	63
-21.6E-204NL19	lm							indeterminate	indeterminate		56	fragme	88
-21.6E-204NL19	mm							indeterminate	long bone		156	fragme	83
-21.6E-204NL19	mm							indeterminate	rib/spine		75	fragme	44
-21.6E-204NL19	mm							indeterminate	indeterminate		111	fragme	58
-21.6E-204NL19	mm							indeterminate	rib/spine		8	fragme	4
-21.6E-204NL19	Aves					bird		indeterminate	long bone		1	fragme	1
-21.6E-204NL19	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		11	fragme	4
-21.6E-204NL19	unident							indeterminate	indeterminate			fragme	228
-21.6E-204NL19	Osteichthyes					fish		indeterminate	indeterminate		1	fragme	2
-21.6E-204NL19	Osteichthyes					fish		indeterminate	skull		1	1/2	1
-21.6E-204NL19	Osteichthyes					fish		indeterminate	vert		1	comple	0
-21.6E-204NL19	Reptilia	Testudines				turtle		fused	carapace		1	fragme	0
-21.6E-204NL19	Aves					bird		indeterminate	long bone		2	fragme	1
-21.6E-204NL19	Mammalia								tooth		12	fragme	5
-21.6E-204NL19	sm							indeterminate	long bone		1	fragme	0
-21.6E-204NL19	mm							fused	costal cartilage		1	fragme	0
-21.6E-204NL19	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		1	fragme	3
-21.6E-204NL19	lm						Distal	indeterminate	phalanx		1	1/4	3
-21.6E-204NL19	lm							indeterminate	3rd Phalanx		1	1/4	2
-21.6E-204NL19	lm							fused	sesamoid		2	comple	3
-21.6E-204NL19	mm							indeterminate	vert		2	<1/4	1
-21.6E-204NL19	lm/mm							indeterminate	skull		11	fragme	7
-21.6E-204NL19	lm							indeterminate	long bone		46	fragme	58
-21.6E-204NL19	lm							indeterminate	rib/spine		9	fragme	4
-21.6E-204NL19	lm							indeterminate	indeterminate		16	fragme	17
-21.6E-204NL19	mm							indeterminate	long bone		171	fragme	61
-21.6E-204NL19	mm							indeterminate	rib/spine		46	fragme	9
-21.6E-204NL19	mm							indeterminate	indeterminate		47	fragme	19
-21.6E-204NL19	unident							indeterminate	indeterminate			fragme	184
-21.6E-204NL19	lm							indeterminate	vert, lumbar		2	fragme	30
-21.6E-204NL19	lm							unfused	vert, lumbar		1	fragme	14

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL19		skull	b=8, pc=1
-21.6E-204NL19		long bone	b=14, pc=34, c=1
-21.6E-204NL19		rib/spine	b=12, pc=6
-21.6E-204NL19		indeterminate	b=10, pc=19
-21.6E-204NL19		long bone	b=21, pc=48, c=1
-21.6E-204NL19		rib/spine	b=30, pc=47
-21.6E-204NL19		indeterminate	b=18, pc=23
-21.E-204NL19		rib/spine	b=8
-21.6E-204NL19	bird	long bone	
-21.6E-204NL19	bird/reptile	indeterminate	b=2, c=1
-21.6E-204NL19		indeterminate	
-21.6E-204NL19	fish	indeterminate	
-21.6E-204NL19	fish	skull	
-21.6E-204NL19	fish	vert	diam = 5.09
-21.6E-204NL19	turtle	carapace	
-21.6E-204NL19	bird	long bone	
-21.6E-204NL19		tooth	b=2
-21.6E-204NL19		long bone	b=1
-21.6E-204NL19		costal cartilage	
-21.6E-204NL19	L artiodactyl	metapodial	
-21.6E-204NL19		phalanx	b=1
-21.6E-204NL19		3rd Phalanx	
-21.6E-204NL19		sesamoid	b=1
-21.6E-204NL19		vert	
-21.6E-204NL19		skull	b=6, pc=2
-21.6E-204NL19		long bone	b=9, pc=9
-21.6E-204NL19		rib/spine	b=1
-21.6E-204NL19		indeterminate	b=2, pc=5, c=1
-21.6E-204NL19		long bone	b=22, pc=12, c=4
-21.6E-204NL19		rib/spine	b=18, pc=8
-21.6E-204NL19		indeterminate	b=9, pc=6, c=3
-21.6E-204NL19		indeterminate	
-21.6E-204NL19		vert, lumbar	
-21.6E-204NL19		vert, lumbar	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL19	lm							indeterminate	indeterminate		1	fragme	1
-21.6E-204NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	calcaneus	left	2	1/2	34
-21.6E-204NL19	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		2	fragme	6
-21.6E-204NL19	lm							Indeterminate	long bone		126	fragme	135
-21.6E-204NL19	lm						Proxim	Indeterminate	calcaneus	right	1	fragme	8
-21.6E-204NL19	mm							Indeterminate	indeterminate		36	fragme	27
-21.6E-204NL19	lm							indeterminate	long bone		128	fragme	137
-21.6E-204NL19	lm							indeterminate	rib/spine		62	fragme	54
-21.6E-204NL19	lm							indeterminate	skull		20	fragme	37
-21.6E-204NL19	mm							indeterminate	long bone		4	fragme	1
-21.6E-204NL19	lm							indeterminate	vert		7	fragme	33
-21.6E-204NL19	lm/mm							indeterminate	ilium		2	fragme	12
-21.6E-204NL19	mm							indeterminate	scapula		1	fragme	2
-21.6E-204NL19	lm							indeterminate	indeterminate		1	fragme	2
-21.6E-204NL2	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	3rd Phalanx	right	1	3/4	15
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	central tarsal	left	1	comple	30
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	tarsal 2/3	left	1	comple	6
-21.6E-204NL20	Mammalia			Antilope	cervicapra	blackbuck		fused	2nd phalanx	right	1	comple	8
-21.6E-204NL20	Mammalia			Antilope	cervicapra	blackbuck		fused	3rd Phalanx	right	1	comple	6
-21.6E-204NL20	Mammalia			Antilope	cervicapra	blackbuck		fused	3rd Phalanx	right	1	comple	8
-21.6E-204NL20	Mammalia			Antilope	cervicapra	blackbuck		fused	1st phalanx	left	1	comple	17
-21.6E-204NL20	lm							fused	sesamoid		1	3/4	2
-21.6E-204NL20	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	2
-21.6E-204NL20	lm						Distal	fused	phalanx		1	<1/4	2
-21.6E-204NL20	lm							fused	ilium		2	fragme	23
-21.6E-204NL20	Mammalia								antler		2	fragme	1
-21.6E-204NL20	Mammalia								tooth		9	fragme	4
-21.6E-204NL20	lm							indeterminate	vert		1	fragme	5
-21.6E-204NL20	lm							unfused	vert		1	fragme	5
-21.6E-204NL20	lm/mm						shaft	unfused	metapodial		1	fragme	0
-21.6E-204NL20	lm/mm						epiphy	unfused	vert		1	fragme	0
-21.6E-204NL20	Osteichthyes					fish		fused	vert		1	comple	4
-21.6E-204NL20	Reptilia	Sauria				lizard		fused	vert		1	1/2	0
-21.6E-204NL20	Aves					bird		indeterminate	long bone		7	fragme	9

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL19		indeterminate	pc=1
-21.6E-204NL19	zebu/buffalo	calcaneus	b=2, pc=1
-21.6E-204NL19	L artiodactyl	metapodial	b=2
-21.6E-204NL19		long bone	b=73, pc=53
-21.6E-204NL19		calcaneus	b=1
-21.6E-204NL19		indeterminate	b=22, pc=14
-21.6E-204NL19		long bone	b=73, pc=53, c=2
-21.6E-204NL19		rib/spine	b=42, pc=20
-21.6E-204NL19		skull	b=17, pc=3
-21.6E-204NL19		long bone	pc=4
-21.6E-204NL19		vert	pc=7
-21.6E-204NL19		ilium	pc=2
-21.6E-204NL19		scapula	pc=1
-21.6E-204NL19		indeterminate	c=1
-21.6E-204NL2	zebu	3rd Phalanx	MBS 24.02
-21.6E-204NL20	zebu	central tarsal	
-21.6E-204NL20	zebu	tarsal 2/3	
-21.6E-204NL20	blackbuck	2nd phalanx	GL 40.38 Bp 21.75 Bd 16.55
-21.6E-204NL20	blackbuck	3rd Phalanx	DLS 44.31 Ld 40.31 MBS 13.09
-21.6E-204NL20	blackbuck	3rd Phalanx	DLS 54.56 Ld 44.63 MBS 18.2
-21.6E-204NL20	blackbuck	1st phalanx	GLPe 67.50 Bp 19.45 Bd 19.24
-21.6E-204NL20		sesamoid	
-21.6E-204NL20	L artiodactyl	metapodial	pc=1
-21.6E-204NL20		phalanx	pc=1
-21.6E-204NL20		ilium	b=2
-21.6E-204NL20		antler	
-21.6E-204NL20		tooth	
-21.6E-204NL20		vert	b=1
-21.6E-204NL20		vert	
-21.6E-204NL20		metapodial	dev=fetal/newborn
-21.6E-204NL20		vert	dev=fetal/newborn
-21.6E-204NL20	fish	vert	diam = 24.33
-21.6E-204NL20	lizard	vert	
-21.6E-204NL20	bird	long bone	b=6, pc=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL20	sm							indeterminate	rib		3	fragme	0
-21.6E-204NL20	lm							indeterminate	skull		6	fragme	11
-21.6E-204NL20	lm							indeterminate	long bone		42	fragme	85
-21.6E-204NL20	lm							indeterminate	rib/spine		10	fragme	10
-21.6E-204NL20	lm							indeterminate	indeterminate		16	fragme	49
-21.6E-204NL20	mm							indeterminate	long bone		306	fragme	127
-21.6E-204NL20	mm							indeterminate	rib/spine		215	fragme	64
-21.6E-204NL20	mm							indeterminate	skull		19	fragme	12
-21.6E-204NL20	mm							indeterminate	indeterminate		174	fragme	77
-21.6E-204NL20	unident							indeterminate	indeterminate			fragme	297
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2nd phalanx	left	1	comple	9
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	2nd phalanx	right	1	1/4	3
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	1st phalanx		1	1/2	6
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	1st phalanx		1	<1/4	2
-21.6E-204NL20	lm						Distal	fused	phalanx		5	<1/4	10
-21.6E-204NL20	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	6
-21.6E-204NL20	mm						Distal	fused	phalanx		1	<1/4	0
-21.6E-204NL20	Mammalia								antler		5	fragme	5
-21.6E-204NL20	lm							fused	3rd Phalanx		5	1/4	12
-21.6E-204NL20	lm							fused	sesamoid		2	comple	2
-21.6E-204NL20	lm							fused	carpal/tarsal		2	fragme	3
-21.6E-204NL20	lm							fused	petris temporal		1	fragme	11
-21.6E-204NL20	Mammalia								tooth		8	fragme	4
-21.6E-204NL20	lm							fused	costal cartilage		2	fragme	1
-21.6E-204NL20	lm							indeterminate	vert		3	fragme	9
-21.6E-204NL20	lm/mm							indeterminate	vert		4	fragme	3
-21.6E-204NL20	Reptilia	Testudines				turtle		fused	carapace		10	fragme	3
-21.6E-204NL20	Osteichthyes					fish		fused	vert		1	comple	0
-21.6E-204NL20	Osteichthyes					fish		indeterminate	indeterminate		1	fragme	0
-21.6E-204NL20	lm							indeterminate	long bone		53	fragme	132
-21.6E-204NL20	lm							indeterminate	rib/spine		10	fragme	14
-21.6E-204NL20	lm							indeterminate	rib		1	fragme	4
-21.6E-204NL20	lm							indeterminate	indeterminate		30	fragme	57
-21.6E-204NL20	mm							indeterminate	long bone		175	fragme	73

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL20		rib	b=1
-21.6E-204NL20		skull	pc=1
-21.6E-204NL20		long bone	b=15, pc=1, c=1
-21.6E-204NL20		rib/spine	b=2, pc=2
-21.6E-204NL20		indeterminate	b=13
-21.6E-204NL20		long bone	b=86, c=6
-21.6E-204NL20		rib/spine	b=102, pc=12, c=2
-21.6E-204NL20		skull	b=4
-21.6E-204NL20		indeterminate	b=78, pc=7
-21.6E-204NL20		indeterminate	
-21.6E-204NL20	zebu	2nd phalanx	GL 37.11 Bp 24.93 Bd 22.39
-21.6E-204NL20	zebu/buffalo	2nd phalanx	
-21.6E-204NL20	zebu/buffalo	1st phalanx	b=1
-21.6E-204NL20	zebu/buffalo	1st phalanx	
-21.6E-204NL20		phalanx	pc=3
-21.6E-204NL20	L artiodactyl	metapodial	pc=1
-21.6E-204NL20		phalanx	
-21.6E-204NL20		antler	
-21.6E-204NL20		3rd Phalanx	b=4
-21.6E-204NL20		sesamoid	pc=1
-21.6E-204NL20		carpal/tarsal	
-21.6E-204NL20		petris tempor	pc=1
-21.6E-204NL20		tooth	b=1
-21.6E-204NL20		costal cartilage	
-21.6E-204NL20		vert	b=2
-21.6E-204NL20		vert	c=1
-21.6E-204NL20	turtle	carapace	poorly-formed sutures
-21.6E-204NL20	fish	vert	b=1, diam = 6.76
-21.6E-204NL20	fish	indeterminate	
-21.6E-204NL20		long bone	b=4, pc=20
-21.6E-204NL20		rib/spine	b=3
-21.6E-204NL20		rib	
-21.6E-204NL20		indeterminate	b=3, pc=9
-21.6E-204NL20		long bone	b=26, pc=20

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL20	mm							indeterminate	rib/spine		80	fragme	23
-21.6E-204NL20	mm							indeterminate	rib		3	fragme	2
-21.6E-204NL20	mm							indeterminate	skull		2	fragme	0
-21.6E-204NL20	mm							indeterminate	indeterminate		84	fragme	48
-21.6E-204NL20	unident							indeterminate	indeterminate			fragme	168
-21.6E-204NL20	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	fused	calcaneus		1	1/4	10
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	1st phalanx	left	1	comple	16
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	metacarpal		1	1/2	44
-21.6E-204NL20	lm						Distal	indeterminate	humerus		1	1/2	131
-21.6E-204NL20	lm							indeterminate	ilium		1	fragme	?
-21.6E-204NL20	lm							unfused	innominate		1	fragme	17
-21.6E-204NL20	lm							indeterminate	vert		1	1/4	16
-21.6E-204NL20	mm							indeterminate	vert		1	<1/4	0
-21.6E-204NL20	lm							indeterminate	astragalus		1	1/2	36
-21.6E-204NL20	lm							indeterminate	ilium		1	<1/4	9
-21.6E-204NL20	lm							indeterminate	long bone		53	fragme	122
-21.6E-204NL20	lm							indeterminate	nasal		1	1/4	10
-21.6E-204NL20	lm							indeterminate	mandible	left	1	fragme	16
-21.6E-204NL20	lm							indeterminate	rib/spine		14	fragme	28
-21.6E-204NL20	lm							indeterminate	indeterminate		32	fragme	56
-21.6E-204NL20	unident							indeterminate	indeterminate			fragme	8
-21.6E-204NL20	lm/mm							indeterminate	long bone		1	fragme	1
-21.6E-204NL20	Aves					bird		indeterminate	long bone		3	fragme	3
-21.6E-204NL20	Osteichthyes					fish		indeterminate	vert		1	comple	0
-21.6E-204NL20	Reptilia	Testudines				turtle		fused	carapace		1	fragme	0
-21.6E-204NL20	Mammalia								antler		2	fragme	0
-21.6E-204NL20	Mammalia								tooth		10	fragme	5
-21.6E-204NL20	mm/sm							fused	sesamoid		2	comple	4
-21.6E-204NL20	lm/mm							indeterminate	skull		9	fragme	?
-21.6E-204NL20	lm							indeterminate	long bone		43	fragme	49
-21.6E-204NL20	lm							indeterminate	rib/spine		6	fragme	5
-21.6E-204NL20	lm							indeterminate	indeterminate		9	fragme	14
-21.6E-204NL20	mm							indeterminate	long bone		182	fragme	60
-21.6E-204NL20	mm							indeterminate	rib/spine		37	fragme	11

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL20		rib/spine	b=26, pc=3
-21.6E-204NL20		rib	
-21.6E-204NL20		skull	b=1
-21.6E-204NL20		indeterminate	b=28, pc=18
-21.6E-204NL20		indeterminate	
-21.6E-204NL20	sheep/goat/de	calcaneus	
-21.6E-204NL20	zebu	1st phalanx	c=1, GLPe 56.74 Bp 26.5 Bd 23.73
-21.6E-204NL20	zebu/buffalo	metacarpal	b=1
-21.6E-204NL20		humerus	
-21.6E-204NL20		ilium	
-21.6E-204NL20		innominate	pelvis symphysis
-21.6E-204NL20		vert	pc=1
-21.6E-204NL20		vert	
-21.6E-204NL20		astragalus	
-21.6E-204NL20		ilium	
-21.6E-204NL20		long bone	b=1, pc=1
-21.6E-204NL20		nasal	
-21.6E-204NL20		mandible	cut=1
-21.6E-204NL20		rib/spine	b=1
-21.6E-204NL20		indeterminate	b=1, pc=5
-21.6E-204NL20		indeterminate	
-21.6E-204NL20		long bone	w=1
-21.6E-204NL20	bird	long bone	b=2
-21.6E-204NL20	fish	vert	b=2, diam = 8.89
-21.6E-204NL20	turtle	carapace	c=1
-21.6E-204NL20		antler	
-21.6E-204NL20		tooth	b=102, pc=12, c=2
-21.6E-204NL20		sesamoid	
-21.6E-204NL20		skull	pc=7, c=1
-21.6E-204NL20		long bone	b=4, pc=13
-21.6E-204NL20		rib/spine	b=3
-21.6E-204NL20		indeterminate	b=3, pc=4
-21.6E-204NL20		long bone	b=52, pc=16
-21.6E-204NL20		rib/spine	b=12, pc=8

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL20	mm							indeterminate	indeterminate		49	fragme	19
-21.6E-204NL20	unident							indeterminate	indeterminate			fragme	156
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	radial carpal	left	1	comple	8
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		1	fragme	?
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx	right	1	comple	11
-21.6E-204NL20	Aves					bird		indeterminate	long bone		4	fragme	5
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	metatarsal		1	1/4	25
-21.6E-204NL20	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metacarpal		1	1/4	27
-21.6E-204NL20	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metatarsal		2	<1/4	12
-21.6E-204NL20	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		2	fragme	10
-21.6E-204NL20	Mammalia								antler		5	fragme	3
-21.6E-204NL20	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		1	fragme	1
-21.6E-204NL20	lm							indeterminate	long bone		3	fragme	3
-21.6E-204NL20	Mammalia								tooth		3	fragme	2
-21.6E-204NL20	lm						Distal	indeterminate	phalanx		1	<1/4	2
-21.6E-204NL20	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	1
-21.6E-204NL20	lm/mm							indeterminate	vert		6	fragme	10
-21.6E-204NL20	lm/mm							unfused	vert		1	fragme	2
-21.6E-204NL20	lm							indeterminate	carpal/tarsal		1	1/4	4
-21.6E-204NL20	lm							fused	sesamoid		2	comple	3
-21.6E-204NL20	lm							indeterminate	ilium		1	fragme	3
-21.6E-204NL20	lm							indeterminate	scapula		1	fragme	3
-21.6E-204NL20	lm							indeterminate	skull		7	fragme	10
-21.6E-204NL20	lm							indeterminate	long bone		72	fragme	213
-21.6E-204NL20	lm							indeterminate	rib/spine		49	fragme	65
-21.6E-204NL20	lm							indeterminate	rib		3	fragme	17
-21.6E-204NL20	lm							indeterminate	indeterminate		35	fragme	68
-21.6E-204NL20	mm							indeterminate	long bone		86	fragme	51
-21.6E-204NL20	mm							indeterminate	rib/spine		31	fragme	13
-21.6E-204NL20	mm							indeterminate	indeterminate		62	fragme	39
-21.6E-204NL20	unident							indeterminate	indeterminate			fragme	70
-21.6E-204NL20	Mammalia	Artiodactyla	Suidae	Sus		pig	Proxim	fused	2nd metatarsal		1	1/4	0
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo		fused	3rd Phalanx	left	1	3/4	22
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	metacarpal		1	1/2	31

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL20		indeterminate	b=20, pc=7, c=1
-21.6E-204NL20		indeterminate	
-21.6E-204NL20	zebu/buffalo	radial carpal	c=1
-21.6E-204NL20	zebu/buffalo	horn core	
-21.6E-204NL20	zebu/buffalo	3rd Phalanx	DLS 63.28 Ld 48.69 MBS 21.44
-21.6E-204NL20	bird	long bone	b=1
-21.6E-204NL20	zebu/buffalo	metatarsal	Bd 56.51
-21.6E-204NL20	L artiodactyl	metacarpal	
-21.6E-204NL20	L artiodactyl	metatarsal	b=2
-21.6E-204NL20	L artiodactyl	metapodial	b=1, pc=1
-21.6E-204NL20		antler	b=1
-21.6E-204NL20	L artiodactyl	metapodial	dev=fetal/newborn
-21.6E-204NL20		long bone	dev=fetal/newborn, pc=1
-21.6E-204NL20		tooth	
-21.6E-204NL20		phalanx	b=1
-21.6E-204NL20	L artiodactyl	metapodial	
-21.6E-204NL20		vert	b=2
-21.6E-204NL20		vert	b=1
-21.6E-204NL20		carpal/tarsal	
-21.6E-204NL20		sesamoid	b=1
-21.6E-204NL20		ilium	b=1
-21.6E-204NL20		scapula	b=1
-21.6E-204NL20		skull	b=4
-21.6E-204NL20		long bone	b=17, pc=19
-21.6E-204NL20		rib/spine	b=15, pc=12
-21.6E-204NL20		rib	
-21.6E-204NL20		indeterminate	b=9, pc=8
-21.6E-204NL20		long bone	b=22, pc=8
-21.6E-204NL20		rib/spine	
-21.6E-204NL20		indeterminate	b=17, pc=8
-21.6E-204NL20		indeterminate	
-21.6E-204NL20	pig	2nd metatars	b=1
-21.6E-204NL20	buffalo	3rd Phalanx	Ld 63.01 MBS 32.07
-21.6E-204NL20	zebu/buffalo	metacarpal	pc=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	1st phalanx	left	1	3/4	14
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	left	1	3/4	12
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	2nd phalanx	left	1	1/4	5
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	phalanx		1	1/4	2
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		3	fragme	13
-21.6E-204NL20	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	2
-21.6E-204NL20	Mammalia	Artiodactyla	Bovidae	Antilope	cervicapra	blackbuck	Proxim	fused	2nd phalanx		1	1/2	2
-21.6E-204NL20	Mammalia								antler		4	fragme	7
-21.6E-204NL20	lm							indeterminate	carpal/tarsal		2	fragme	11
-21.6E-204NL20	mm							indeterminate	carpal/tarsal		1	fragme	1
-21.6E-204NL20	lm							fused	accessory carpal		2	comple	5
-21.6E-204NL20	lm							indeterminate	sesamoid		3	fragme	2
-21.6E-204NL20	Osteichthyes					fish		fused	vert		2	comple	0
-21.6E-204NL20	Reptilia					reptile		fused	vert		1	1/2	0
-21.6E-204NL20	Mammalia								tooth		7	fragme	3
-21.6E-204NL20	Mammalia	Carnivora	Felidae			s felid	Proxim	fused	radius		1	1/4	0
-21.6E-204NL20	sm							indeterminate	long bone		1	fragme	0
-21.6E-204NL20	lm							indeterminate	scapula		4	fragme	24
-21.6E-204NL20	lm/mm							indeterminate	scapula		3	fragme	8
-21.6E-204NL20	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		3	fragme	17
-21.6E-204NL20	Mammalia	Artiodactyla				M artiodactyl	shaft	fused	metapodial		1	fragme	0
-21.6E-204NL20	mm							indeterminate	long bone		1	fragme	0
-21.6E-204NL20	lm							indeterminate	vert		1	<1/4	5
-21.6E-204NL20	mm							indeterminate	vert		5	fragme	5
-21.6E-204NL20	mm							unfused	vert		1	fragme	1
-21.6E-204NL20	lm/mm							indeterminate	skull		9	fragme	9
-21.6E-204NL20	lm							indeterminate	mandible		2	fragme	16
-21.6E-204NL20	lm							indeterminate	long bone		58	fragme	119
-21.6E-204NL20	lm							indeterminate	rib/spine		37	fragme	42
-21.6E-204NL20	lm							indeterminate	indeterminate		51	fragme	120
-21.6E-204NL20	mm							indeterminate	long bone		201	fragme	72
-21.6E-204NL20	mm							indeterminate	rib/spine		77	fragme	19
-21.6E-204NL20	mm							indeterminate	indeterminate		78	fragme	27
-21.6E-204NL20	unident							indeterminate	indeterminate			fragme	174

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL20	zebu/buffalo	1st phalanx	GLPe 59.72 Bp 28.15 Bd 28.41
-21.6E-204NL20	zebu/buffalo	2nd phalanx	GL 45.41, Bd 23.98
-21.6E-204NL20	zebu/buffalo	2nd phalanx	Bd 21.87
-21.6E-204NL20	zebu/buffalo	phalanx	
-21.6E-204NL20	zebu/buffalo	horn core	
-21.6E-204NL20	L artiodactyl	metapodial	pc=1
-21.6E-204NL20	blackbuck	2nd phalanx	b=1, Bp 11.29
-21.6E-204NL20		antler	
-21.6E-204NL20		carpal/tarsal	pc=1
-21.6E-204NL20		carpal/tarsal	
-21.6E-204NL20		accessory ca	b=1
-21.6E-204NL20		sesamoid	b=1
-21.6E-204NL20	fish	vert	diam = 9.36, 4.48
-21.6E-204NL20	reptile	vert	b=1
-21.6E-204NL20		tooth	
-21.6E-204NL20	s felid	radius	
-21.6E-204NL20		long bone	
-21.6E-204NL20		scapula	b=2, pc=2
-21.6E-204NL20		scapula	
-21.6E-204NL20	L artiodactyl	metapodial	b=2
-21.6E-204NL20	M artiodactyl	metapodial	dev=fetal/newborn
-21.6E-204NL20		long bone	b=1, dev=fetal/newborn
-21.6E-204NL20		vert	pc=1
-21.6E-204NL20		vert	b=2
-21.6E-204NL20		vert	b=1
-21.6E-204NL20		skull	b=4
-21.6E-204NL20		mandible	b=1
-21.6E-204NL20		long bone	b=18, pc=13
-21.6E-204NL20		rib/spine	b=5, pc=6, c=3
-21.6E-204NL20		indeterminate	b=6, pc=13
-21.6E-204NL20		long bone	b=56, pc=16, c=7
-21.6E-204NL20		rib/spine	b=46, pc=10
-21.6E-204NL20		indeterminate	b=24, c=11
-21.6E-204NL20		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae			S bovid	Distal	fused	humerus		1	1/4	35
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	intermediate	right	1	1/2	6
-21.6E-204NL21	lm							fused	carpal/tarsal		1	1/2	5
-21.6E-204NL21	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	1/4	5
-21.6E-204NL21	lm						Distal	fused	phalanx		1	<1/4	1
-21.6E-204NL21	lm/mm							fused	ilium		1	<1/4	4
-21.6E-204NL21	lm							indeterminate	vert		7	fragme	25
-21.6E-204NL21	mm							indeterminate	vert		1	fragme	1
-21.6E-204NL21	Mammalia								tooth		16	fragme	9
-21.6E-204NL21	lm							indeterminate	skull		6	fragme	18
-21.6E-204NL21	Aves					bird		indeterminate	long bone		5	fragme	3
-21.6E-204NL21	sm							indeterminate	rib		1	fragme	0
-21.6E-204NL21	lm							indeterminate	long bone		82	fragme	227
-21.6E-204NL21	lm							indeterminate	rib/spine		30	fragme	56
-21.6E-204NL21	lm							indeterminate	indeterminate		30	fragme	89
-21.6E-204NL21	mm							indeterminate	long bone		171	fragme	78
-21.6E-204NL21	mm							indeterminate	rib/spine		127	fragme	77
-21.6E-204NL21	mm							indeterminate	skull		19	fragme	12
-21.6E-204NL21	mm							indeterminate	indeterminate		135	fragme	76
-21.6E-204NL21	unident							indeterminate	indeterminate			fragme	182
-21.6E-204NL21	Mammalia			Antilope	cervicapra	blackbuck		fused	acetabulum		1	3/4	6
-21.6E-204NL21	lm						Distal	indeterminate	scapula		2	fragme	22
-21.6E-204NL21	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		2	fragme	42
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	central tarsal	right	1	1/2	31
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	tarsal 2/3	right	1	comple	10
-21.6E-204NL21	lm							fused	calcaneus		2	1/4	49
-21.6E-204NL21	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metapodial		1	<1/4	7
-21.6E-204NL21	mm							fused	Ilium		1	1/4	4
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		6	fragme	18
-21.6E-204NL21	Mammalia								antler		3	fragme	2
-21.6E-204NL21	Mammalia								tooth		8	fragme	3
-21.6E-204NL21	lm							indeterminate	vert		9	fragme	42
-21.6E-204NL21	mm							indeterminate	vert		7	fragme	9
-21.6E-204NL21	lm							indeterminate	skull		9	fragme	19

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL21	S bovid	humerus	b=1
-21.6E-204NL21	zebu/buffalo	intermediate carpal	
-21.6E-204NL21		carpal/tarsal	pc=1
-21.6E-204NL21	L artiodactyl	metapodial	pc=1
-21.6E-204NL21		phalanx	pc=1
-21.6E-204NL21		ilium	
-21.6E-204NL21		vert	b=1, pc=1, cut=6
-21.6E-204NL21		vert	cut=1
-21.6E-204NL21		tooth	b=14
-21.6E-204NL21		skull	b=4
-21.6E-204NL21	bird	long bone	pc=2
-21.6E-204NL21		rib	b=1
-21.6E-204NL21		long bone	b=26, pc=16
-21.6E-204NL21		rib/spine	b=9, pc=2, c=1, cut=1
-21.6E-204NL21		indeterminate	b=1, pc=10, c=1
-21.6E-204NL21		long bone	b=38, pc=6, c=6
-21.6E-204NL21		rib/spine	b=38, pc=6, c=6
-21.6E-204NL21		skull	b=9, c=1
-21.6E-204NL21		indeterminate	b=41, pc=12, c=1
-21.6E-204NL21		indeterminate	
-21.6E-204NL21	blackbuck	acetabulum	
-21.6E-204NL21		scapula	pc=2
-21.6E-204NL21	L artiodactyl	metapodial	pc=2
-21.6E-204NL21	zebu/buffalo	central tarsal	
-21.6E-204NL21	zebu/buffalo	tarsal 2/3	
-21.6E-204NL21		calcaneus	pc=1
-21.6E-204NL21	L artiodactyl	metapodial	b=1
-21.6E-204NL21		llium	
-21.6E-204NL21	zebu/buffalo	horn core	b=6
-21.6E-204NL21		antler	b=1
-21.6E-204NL21		tooth	b=1
-21.6E-204NL21		vert	b=5
-21.6E-204NL21		vert	b=2
-21.6E-204NL21		skull	b=4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL21	lm							indeterminate	long bone		68	fragme	209
-21.6E-204NL21	lm							indeterminate	indeterminate		38	fragme	75
-21.6E-204NL21	Aves					L/m bird		fused	fibula		1	fragme	0
-21.6E-204NL21	Reptilia					reptile		fused	vert		1	1/4	0
-21.6E-204NL21	Osteichthyes					fish		fused	vert		1	comple	0
-21.6E-204NL21	lm							indeterminate	rib/spine		18	fragme	26
-21.6E-204NL21	mm							indeterminate	long bone		140	fragme	72
-21.6E-204NL21	mm							indeterminate	rib/spine		46	fragme	20
-21.6E-204NL21	mm							indeterminate	skull		13	fragme	8
-21.6E-204NL21	mm							indeterminate	indeterminate		137	fragme	78
-21.6E-204NL21	unident							indeterminate	indeterminate			fragme	199
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	astragalus	right	1	comple	61
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	tibia	right	1	1/4	24
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx		1	3/4	8
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	central tarsal		1	1/4	11
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	astragalus	left	1	1/4	7
-21.6E-204NL21	lm						Distal	indeterminate	phalanx		1	1/4	2
-21.6E-204NL21	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metapodial		1	fragme	9
-21.6E-204NL21	lm							fused	calcaneus		1	1/4	22
-21.6E-204NL21	lm/mm							fused	ilium		1	fragme	6
-21.6E-204NL21	lm							fused	sesamoid		1	comple	2
-21.6E-204NL21	lm						epiphy	unfused	long bone		2	fragme	3
-21.6E-204NL21	Mammalia								tooth		2	fragme	4
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	coronoid process		1	fragme	6
-21.6E-204NL21	lm/mm							fused	scapula		2	fragme	15
-21.6E-204NL21	lm							indeterminate	vert		6	fragme	24
-21.6E-204NL21	lm							indeterminate	skull		10	fragme	26
-21.6E-204NL21	lm							indeterminate	long bone		83	fragme	269
-21.6E-204NL21	lm							indeterminate	rib/spine		25	fragme	41
-21.6E-204NL21	lm							indeterminate	indeterminate		67	fragme	196
-21.6E-204NL21	lm/mm							indeterminate	indeterminate		86	fragme	33
-21.6E-204NL21	lm							fused	calcaneus		1	1/4	25
-21.6E-204NL21	lm							fused	scapula		1	1/4	11
-21.6E-204NL21	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	1/4	3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL21		long bone	b=24, pc=11
-21.6E-204NL21		indeterminate	b=14, pc=8
-21.6E-204NL21	L/m bird	fibula	
-21.6E-204NL21	reptile	vert	b=1
-21.6E-204NL21	fish	vert	diam = 4.25
-21.6E-204NL21		rib/spine	b=2, pc=3
-21.6E-204NL21		long bone	b=36, c=1
-21.6E-204NL21		rib/spine	b=12, pc=8
-21.6E-204NL21		skull	b=9
-21.6E-204NL21		indeterminate	b=43, pc=20
-21.6E-204NL21		indeterminate	
-21.6E-204NL21	zebu	astragalus	tuberculotic? osteomyelitis, GL1 62.93 GLm 58.69 D1 34.83 Bd 40.92
-21.6E-204NL21	zebu	tibia	
-21.6E-204NL21	zebu/buffalo	2nd phalanx	GL 41.14 Bd 20.75
-21.6E-204NL21	zebu/buffalo	central tarsal	b=1
-21.6E-204NL21	zebu/buffalo	astragalus	
-21.6E-204NL21		phalanx	
-21.6E-204NL21	L artiodactyl	metapodial	b=1
-21.6E-204NL21		calcaneus	
-21.6E-204NL21		ilium	b=1
-21.6E-204NL21		sesamoid	b=1
-21.6E-204NL21		long bone	
-21.6E-204NL21		tooth	dev=old adult, b=2, resorbed alveolus
-21.6E-204NL21	zebu/buffalo	coronoid process	
-21.6E-204NL21		scapula	pc=1
-21.6E-204NL21		vert	b=3
-21.6E-204NL21		skull	b=3, pc=1
-21.6E-204NL21		long bone	b=6, pc=33
-21.6E-204NL21		rib/spine	b=7, pc=2
-21.6E-204NL21		indeterminate	b=12, pc=14, c=1
-21.6E-204NL21		indeterminate	b=30
-21.6E-204NL21		calcaneus	pc=1
-21.6E-204NL21		scapula	pc=1
-21.6E-204NL21	L artiodactyl	metapodial	b=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	radial carpal	left	1	comple	6
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	intermediate	left	1	1/2	5
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	ulnar carpal	left	1	1/2	8
-21.6E-204NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	carpal 2/3	left	1	1/2	9
-21.6E-204NL21	Reptilia	Squamata	Colubridae	Elaphe		Trinket snake		fused	vert		1	3/4	1
-21.6E-204NL21	lm							indeterminate	vert		4	fragme	10
-21.6E-204NL21	mm							indeterminate	vert		3	fragme	2
-21.6E-204NL21	lm							indeterminate	skull		10	fragme	14
-21.6E-204NL21	mm							indeterminate	skull		26	fragme	13
-21.6E-204NL21	sm							indeterminate	long bone		1	fragme	0
-21.6E-204NL21	mm							fused	sesamoid		2	fragme	0
-21.6E-204NL21	Mammalia								antler		4	fragme	5
-21.6E-204NL21	Mammalia								tooth		28	fragme	17
-21.6E-204NL21	lm/mm							indeterminate	scapula		1	<1/4	3
-21.6E-204NL21	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		3	fragme	1
-21.6E-204NL21	lm							indeterminate	long bone		37	fragme	102
-21.6E-204NL21	lm							indeterminate	rib/spine		10	fragme	11
-21.6E-204NL21	lm							indeterminate	indeterminate		37	fragme	75
-21.6E-204NL21	mm							indeterminate	long bone		184	fragme	81
-21.6E-204NL21	mm							indeterminate	rib/spine		63	fragme	21
-21.6E-204NL21	mm							indeterminate	indeterminate		106	fragme	60
-21.6E-204NL21	unident							indeterminate	indeterminate			fragme	148
-21.6E-204NL22	lm						Distal	fused	calcaneus		1	1/4	18
-21.6E-204NL22	lm						Distal	fused	phalanx		1	1/4	3
-21.6E-204NL22	Mammalia								antler		1	fragme	0
-21.6E-204NL22	lm/mm							indeterminate	long bone		1	fragme	0
-21.6E-204NL22	Mammalia								tooth		19	fragme	4
-21.6E-204NL22	lm							indeterminate	vert		2	fragme	12
-21.6E-204NL22	mm							indeterminate	vert		1	fragme	1
-21.6E-204NL22	lm							indeterminate	skull		3	fragme	4
-21.6E-204NL22	lm							indeterminate	mandible		1	fragme	7
-21.6E-204NL22	Aves					bird		indeterminate	long bone		2	fragme	2
-21.6E-204NL22	lm							indeterminate	long bone		24	fragme	56
-21.6E-204NL22	lm							indeterminate	rib/spine		17	fragme	33
-21.6E-204NL22	lm							indeterminate	indeterminate		15	fragme	26

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL21	zebu/buffalo	radial carpal	b=1
-21.6E-204NL21	zebu/buffalo	intermediate carpal	
-21.6E-204NL21	zebu/buffalo	ulnar carpal	
-21.6E-204NL21	zebu/buffalo	carpal 2/3	
-21.6E-204NL21	Trinket snake	vert	
-21.6E-204NL21		vert	pc=1
-21.6E-204NL21		vert	pc=2
-21.6E-204NL21		skull	b=7
-21.6E-204NL21		skull	b=19
-21.6E-204NL21		long bone	b=1
-21.6E-204NL21		sesamoid	
-21.6E-204NL21		antler	
-21.6E-204NL21		tooth	b=23
-21.6E-204NL21		scapula	
-21.6E-204NL21	bird/reptile	indeterminate	
-21.6E-204NL21		long bone	b=18, pc=8
-21.6E-204NL21		rib/spine	b=1, pc=3, cut=1
-21.6E-204NL21		indeterminate	b=8, pc=9, c=2
-21.6E-204NL21		long bone	b=99, pc=7, c=3
-21.6E-204NL21		rib/spine	b=26, c=5, cut=2
-21.6E-204NL21		indeterminate	b=31, pc=13, c=3
-21.6E-204NL21		indeterminate	
-21.6E-204NL22		calcaneus	
-21.6E-204NL22		phalanx	
-21.6E-204NL22		antler	
-21.6E-204NL22		long bone	w=1
-21.6E-204NL22		tooth	b=1
-21.6E-204NL22		vert	
-21.6E-204NL22		vert	pc=1
-21.6E-204NL22		skull	
-21.6E-204NL22		mandible	
-21.6E-204NL22	bird	long bone	b=1
-21.6E-204NL22		long bone	b=2
-21.6E-204NL22		rib/spine	b=4
-21.6E-204NL22		indeterminate	b=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL22	mm							indeterminate	long bone		142	fragme	47
-21.6E-204NL22	mm							indeterminate	rib/spine		67	fragme	23
-21.6E-204NL22	mm							indeterminate	skull		20	fragme	12
-21.6E-204NL22	mm							indeterminate	indeterminate		60	fragme	33
-21.6E-204NL22	unident							indeterminate	indeterminate			fragme	117
-21.6E-204NL22	lm						Distal	indeterminate	phalanx		1	1/2	7
-21.6E-204NL22	Mammalia	Artiodactyla	Cervidae	Cervus	unicolor	sambar		fused	2nd phalanx		1	comple	8
-21.6E-204NL22	lm							fused	patella		1	comple	20
-21.6E-204NL22	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	astragalus		1	1/2	27
-21.6E-204NL22	Mammalia	Artiodactyla	Suidae	Sus		pig	Proxim	fused	2nd metatarsal		1	1/4	2
-21.6E-204NL22	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	3rd Phalanx		1	comple	0
-21.6E-204NL22	mm							fused	sesamoid		1	comple	0
-21.6E-204NL22	lm/mm							fused	carpal/tarsal		1	fragme	0
-21.6E-204NL22	lm						Proxim	fused	phalanx		1	1/4	4
-21.6E-204NL22	lm							fused	carpal/tarsal		6	fragme	31
-21.6E-204NL22	Mammalia								antler		9	fragme	10
-21.6E-204NL22	lm/mm							indeterminate	indeterminate		1	fragme	0
-21.6E-204NL22	Mammalia								tooth		12	fragme	6
-21.6E-204NL22	lm							indeterminate	skull		20	fragme	32
-21.6E-204NL22	lm							indeterminate	vert		6	fragme	40
-21.6E-204NL22	lm							unfused	vert		1	fragme	7
-21.6E-204NL22	mm							indeterminate	vert		3	fragme	4
-21.6E-204NL22	Aves					bird		indeterminate	long bone		1	fragme	0
-21.6E-204NL22	lm							indeterminate	long bone		83	fragme	173
-21.6E-204NL22	lm							indeterminate	rib/spine		50	fragme	92
-21.6E-204NL22	lm							indeterminate	indeterminate		34	fragme	111
-21.6E-204NL22	mm							indeterminate	long bone		134	fragme	57
-21.6E-204NL22	mm							indeterminate	rib/spine		78	fragme	26
-21.6E-204NL22	mm							indeterminate	skull		29	fragme	16
-21.6E-204NL22	mm							indeterminate	indeterminate		120	fragme	70
-21.6E-204NL22	unident							indeterminate	indeterminate			fragme	175
-21.6E-204NL22	Mammalia								tooth		1	fragme	0
-21.6E-204NL23	Reptilia	Sauria				lizard		fused	vert		1	comple	2
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		7	fragme	11

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL22		long bone	b=16, pc=1
-21.6E-204NL22		rib/spine	b=21, pc=11, c=2
-21.6E-204NL22		skull	b=9
-21.6E-204NL22		indeterminate	b=9, pc=13, c=1
-21.6E-204NL22		indeterminate	
-21.6E-204NL22		phalanx	b=1
-21.6E-204NL22	sambar	2nd phalanx	GLPe 39.27 Bp 20.96 Bd 15.15
-21.6E-204NL22		patella	Gl 52.26 GB 48.2
-21.6E-204NL22	zebu/buffalo	astragalus	pc=1, Dm 37.93
-21.6E-204NL22	pig	2nd metatars	b=1
-21.6E-204NL22	sheep/goat/de	3rd Phalanx	b=1
-21.6E-204NL22		sesamoid	dev=fetal/newborn, c=1
-21.6E-204NL22		carpal/tarsal	dev=fetal/newborn, pc=1
-21.6E-204NL22		phalanx	
-21.6E-204NL22		carpal/tarsal	pc=6
-21.6E-204NL22		antler	b=2
-21.6E-204NL22		indeterminate	pc=1, w=1
-21.6E-204NL22		tooth	b=6
-21.6E-204NL22		skull	b=5, pc=2
-21.6E-204NL22		vert	pc=5
-21.6E-204NL22		vert	pc=1
-21.6E-204NL22		vert	b=2
-21.6E-204NL22	bird	long bone	
-21.6E-204NL22		long bone	b=11, pc=10, c=2
-21.6E-204NL22		rib/spine	b=8, pc=7, c=3, cut=1
-21.6E-204NL22		indeterminate	b=8, pc=11
-21.6E-204NL22		long bone	b=30, pc=11
-21.6E-204NL22		rib/spine	b=32, pc=8, c=3, cut=2
-21.6E-204NL22		skull	b=9
-21.6E-204NL22		indeterminate	b=40, pc=19, c=1
-21.6E-204NL22		indeterminate	
-21.6E-204NL22		tooth	b=1
-21.6E-204NL23	lizard	vert	
-21.6E-204NL23	zebu/buffalo	horn core	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL23	lm							fused	vert, caudal		1	1/2	17
-21.6E-204NL23	lm/mm							indeterminate	innominate		3	fragme	4
-21.6E-204NL23	lm/mm							indeterminate	rib		1	fragme	0
-21.6E-204NL23	lm						Distal	fused	phalanx		1	<1/4	1
-21.6E-204NL23	lm/mm						Proxim	unfused	long bone		1	fragme	0
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	ulnar carpal	right	1	comple	10
-21.6E-204NL23	lm/mm							fused	sesamoid		1	1/2	0
-21.6E-204NL23	sm							fused	mandible	right	1	fragme	0
-21.6E-204NL23	Mammalia								tooth		14	fragme	4
-21.6E-204NL23	Aves					bird		indeterminate	long bone		5	fragme	3
-21.6E-204NL23	Aves/Reptilia					bird/reptile		indeterminate	skull		9	fragme	3
-21.6E-204NL23	lm							indeterminate	skull		11	fragme	27
-21.6E-204NL23	lm							indeterminate	long bone		51	fragme	121
-21.6E-204NL23	lm							indeterminate	rib/spine		33	fragme	38
-21.6E-204NL23	lm							indeterminate	indeterminate		54	fragme	122
-21.6E-204NL23	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	1/4	3
-21.6E-204NL23	mm							indeterminate	long bone		192	fragme	70
-21.6E-204NL23	mm							indeterminate	rib/spine		127	fragme	42
-21.6E-204NL23	mm							indeterminate	skull		38	fragme	24
-21.6E-204NL23	mm							indeterminate	indeterminate		133	fragme	61
-21.6E-204NL23	unident							indeterminate	indeterminate			fragme	168
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	1st phalanx	left	1	comple	15
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae			L bovid	Distal	fused	phalanx	left	1	1/4	4
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae			L bovid	Distal	fused	phalanx	right	1	1/4	4
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	astragalus	right	1	1/2	20
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	ulnar carpal	right	1	comple	7
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	radial carpal	right	1	comple	9
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory ca	right	1	comple	2
-21.6E-204NL23	lm							fused	sesamoid		2	comple	5
-21.6E-204NL23	lm						Proxim	fused	phalanx		1	1/4	1
-21.6E-204NL23	lm/mm						Distal	fused	phalanx		2	1/4	2
-21.6E-204NL23	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	1/4	9
-21.6E-204NL23	Mammalia	Artiodactyla				M artiodactyl	shaft	fused	metapodial		1	fragme	0
-21.6E-204NL23	mm							fused	ulna		1	<1/4	2
-21.6E-204NL23	lm						Distal	fused	scapula		1	1/4	7

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL23		vert, caudal	
-21.6E-204NL23		innominate	dev=fetal/newborn
-21.6E-204NL23		rib	dev=fetal/newborn
-21.6E-204NL23		phalanx	
-21.6E-204NL23		long bone	dev=fetal/newborn, b=1
-21.6E-204NL23	zebu/buffalo	ulnar carpal	
-21.6E-204NL23		sesamoid	
-21.6E-204NL23		mandible	
-21.6E-204NL23		tooth	b=3
-21.6E-204NL23	bird	long bone	
-21.6E-204NL23	bird/reptile	skull	
-21.6E-204NL23		skull	b=1
-21.6E-204NL23		long bone	b=10
-21.6E-204NL23		rib/spine	
-21.6E-204NL23		indeterminate	b=10, pc=4
-21.6E-204NL23	L artiodactyl	metapodial	pc=1
-21.6E-204NL23		long bone	b=13, c=1
-21.6E-204NL23		rib/spine	b=11, c=1
-21.6E-204NL23		skull	b=3
-21.6E-204NL23		indeterminate	b=28
-21.6E-204NL23		indeterminate	
-21.6E-204NL23	zebu	1st phalanx	pc=1, GLPe 52.64 Bp 25.35 Bd 24.74
-21.6E-204NL23	L bovid	phalanx	
-21.6E-204NL23	L bovid	phalanx	
-21.6E-204NL23	zebu	astragalus	Dm 37.61
-21.6E-204NL23	zebu/buffalo	ulnar carpal	
-21.6E-204NL23	zebu/buffalo	radial carpal	
-21.6E-204NL23	zebu/buffalo	accessory carpal	
-21.6E-204NL23		sesamoid	
-21.6E-204NL23		phalanx	
-21.6E-204NL23		phalanx	b=1
-21.6E-204NL23	L artiodactyl	metapodial	pc=1
-21.6E-204NL23	M artiodactyl	metapodial	
-21.6E-204NL23		ulna	
-21.6E-204NL23		scapula	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL23	lm							fused	calcaneus		1	<1/4	7
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		5	fragme	9
-21.6E-204NL23	Mammalia								tooth		16	fragme	16
-21.6E-204NL23	lm/mm							indeterminate	long bone		3	fragme	1
-21.6E-204NL23	Aves					bird		indeterminate	long bone		14	fragme	16
-21.6E-204NL23	Osteichthyes					fish		indeterminate	skull		1	fragme	1
-21.6E-204NL23	Reptilia	Testudines				turtle		fused	coracoid		1	fragme	0
-21.6E-204NL23	lm							indeterminate	vert		9	fragme	44
-21.6E-204NL23	lm							unfused	vert		3	fragme	14
-21.6E-204NL23	lm							indeterminate	skull		18	fragme	46
-21.6E-204NL23	lm							indeterminate	long bone		41	fragme	137
-21.6E-204NL23	lm							indeterminate	rib/spine		46	fragme	116
-21.6E-204NL23	lm							indeterminate	indeterminate		35	fragme	78
-21.6E-204NL23	mm							indeterminate	long bone		128	fragme	64
-21.6E-204NL23	mm							indeterminate	rib/spine		49	fragme	25
-21.6E-204NL23	mm							indeterminate	skull		21	fragme	19
-21.6E-204NL23	mm							indeterminate	indeterminate		56	fragme	39
-21.6E-204NL23	Aves					bird		indeterminate	skull		12	fragme	6
-21.6E-204NL23	unident							indeterminate	indeterminate			fragme	81
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo		fused	astragalus	right	1	comple	77
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo		fused	astragalus	left	1	comple	77
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	tibia	right	1	1/2	87
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	calcaneus	left	1	comple	100
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	central tarsal	left	1	comple	43
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	fused	radius	left	1	1/4	28
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	mandible	right	1	1/4	2
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	fused	tibia		1	1/2	8
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	mandible		1	1/4	37
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus	bubalis	zebu/buffalo		fused	2nd phalanx		1	comple	9
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	carpal 2/3		1	comple	9
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	carpal 4		1	comple	6
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	central tarsal		1	1/2	11
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	tarsal 2/3		1	comple	7
-21.6E-204NL23	lm						epiphy	unfused	long bone		1	fragme	10
-21.6E-204NL23	mm						Proxim	fused	femur		1	fragme	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL23		calcaneus	
-21.6E-204NL23	zebu/buffalo	horn core	
-21.6E-204NL23		tooth	
-21.6E-204NL23		long bone	w=3
-21.6E-204NL23	bird	long bone	b=1
-21.6E-204NL23	fish	skull	
-21.6E-204NL23	turtle	coracoid	
-21.6E-204NL23		vert	
-21.6E-204NL23		vert	
-21.6E-204NL23		skull	
-21.6E-204NL23		long bone	pc=6
-21.6E-204NL23		rib/spine	b=4, pc=3
-21.6E-204NL23		indeterminate	pc=4
-21.6E-204NL23		long bone	
-21.6E-204NL23		rib/spine	pc=5, c=2
-21.6E-204NL23		skull	
-21.6E-204NL23		indeterminate	b=10
-21.6E-204NL23	bird	skull	
-21.6E-204NL23		indeterminate	
-21.6E-204NL23	buffalo	astragalus	GL1 72.86 GLm 65.75 D1 41.74 Dm 40.39
-21.6E-204NL23	buffalo	astragalus	pc=1, GL1 72.91 GLm 66.92 D1 40.28 Dm 37.94
-21.6E-204NL23	zebu	tibia	pc=1, Bd 60.98
-21.6E-204NL23	zebu	calcaneus	GL 144.22 GB 63.99
-21.6E-204NL23	zebu	central tarsal	GB 57.88
-21.6E-204NL23	zebu	radius	pc=1
-21.6E-204NL23	goat	mandible	
-21.6E-204NL23	sheep/goat	tibia	Bd 25.56
-21.6E-204NL23	zebu/buffalo	mandible	pc=1
-21.6E-204NL23	zebu/buffalo	2nd phalanx	GL 40.43 Bp 24.45 Bd 23.15
-21.6E-204NL23	zebu/buffalo	carpal 2/3	
-21.6E-204NL23	zebu/buffalo	carpal 4	
-21.6E-204NL23	zebu/buffalo	central tarsal	
-21.6E-204NL23	zebu/buffalo	tarsal 2/3	pc=1
-21.6E-204NL23		long bone	
-21.6E-204NL23		femur	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL23	lm							fused	scapula		6	fragme	95
-21.6E-204NL23	lm							indeterminate	skull		4	fragme	10
-21.6E-204NL23	lm							indeterminate	vert		5	fragme	51
-21.6E-204NL23	lm							indeterminate	indeterminate		14	fragme	75
-21.6E-204NL23	lm							indeterminate	long bone		9	fragme	38
-21.6E-204NL23	lm							indeterminate	rib/spine		8	fragme	36
-21.6E-204NL23	Aves					bird		indeterminate	long bone		5	fragme	5
-21.6E-204NL23	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	plastron		2	fragme	1
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	fused	1st phalanx	right	1	1/2	7
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat			horn core		1	fragme	4
-21.6E-204NL23	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		13	fragme	11
-21.6E-204NL23	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	3/4	22
-21.6E-204NL23	lm							fused	astragalus		1	1/4	6
-21.6E-204NL23	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	3
-21.6E-204NL23	lm						Distal	fused	phalanx		2	<1/4	2
-21.6E-204NL23	lm						Distal	indeterminate	radius		2	<1/4	13
-21.6E-204NL23	lm							indeterminate	calcaneus		1	1/4	25
-21.6E-204NL23	lm							indeterminate	vert, caudal		1	3/4	2
-21.6E-204NL23	mm							indeterminate	scapula		1	1/4	0
-21.6E-204NL23	mm						Proxim	indeterminate	phalanx		1	1/2	0
-21.6E-204NL23	Mammalia								tooth		7	fragme	6
-21.6E-204NL23	mm							fused	sesamoid		1	comple	1
-21.6E-204NL23	lm/mm							indeterminate	scapula		2	fragme	10
-21.6E-204NL23	lm							indeterminate	vert		4	fragme	5
-21.6E-204NL23	lm							unfused	vert		1	fragme	3
-21.6E-204NL23	mm							indeterminate	vert		3	fragme	3
-21.6E-204NL23	mm							unfused	vert		1	fragme	1
-21.6E-204NL23	lm							indeterminate	skull		27	fragme	34
-21.6E-204NL23	lm							indeterminate	long bone		67	fragme	138
-21.6E-204NL23	lm							indeterminate	rib/spine		29	fragme	39
-21.6E-204NL23	lm							indeterminate	indeterminate		30	fragme	82
-21.6E-204NL23	mm							indeterminate	long bone		206	fragme	81
-21.6E-204NL23	mm							indeterminate	rib/spine		61	fragme	19
-21.6E-204NL23	mm							indeterminate	indeterminate		86	fragme	49
-21.6E-204NL23	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		6	fragme	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL23		scapula	pc=2
-21.6E-204NL23		skull	
-21.6E-204NL23		vert	pc=1
-21.6E-204NL23		indeterminate	b=1
-21.6E-204NL23		long bone	pc=2
-21.6E-204NL23		rib/spine	
-21.6E-204NL23	bird	long bone	
-21.6E-204NL23	softshell turtle	plastron	
-21.6E-204NL23	zebu	1st phalanx	Bp 25.64
-21.6E-204NL23	goat	horn core	
-21.6E-204NL23	zebu/buffalo	horn core	
-21.6E-204NL23	L artiodactyl	metapodial	
-21.6E-204NL23		astragalus	pc=1
-21.6E-204NL23	L artiodactyl	metapodial	
-21.6E-204NL23		phalanx	pc=1
-21.6E-204NL23		radius	
-21.6E-204NL23		calcaneus	
-21.6E-204NL23		vert, caudal	
-21.6E-204NL23		scapula	
-21.6E-204NL23		phalanx	
-21.6E-204NL23		tooth	
-21.6E-204NL23		sesamoid	
-21.6E-204NL23		scapula	
-21.6E-204NL23		vert	
-21.6E-204NL23		vert	
-21.6E-204NL23		vert	
-21.6E-204NL23		vert	
-21.6E-204NL23		skull	b=4
-21.6E-204NL23		long bone	b=5
-21.6E-204NL23		rib/spine	
-21.6E-204NL23		indeterminate	b=4
-21.6E-204NL23		long bone	b=12, c=1
-21.6E-204NL23		rib/spine	b=13, c=2
-21.6E-204NL23		indeterminate	b=5, pc=3
-21.6E-204NL23	bird/reptile	indeterminate	b=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NL23	unident							indeterminate	indeterminate			fragme	176
-21.6E-204NF1L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	3rd Phalanx	left	1	comple	?
-21.6E-204NF1L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2nd phalanx	right	1	comple	?
-21.6E-204NF1L1	lm							fused	sesamoid		1	comple	0
-21.6E-204NF1L1	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		fused	3rd Phalanx		2	comple	0
-21.6E-204NF1L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	scapula		1	1/4	10
-21.6E-204NF1L1	lm						Distal	fused	1st phalanx		1	<1/4	2
-21.6E-204NF1L1	lm							fused	mandible	left	1	<1/4	20
-21.6E-204NF1L1	lm/mm						blade	fused	scapula		1	<1/4	6
-21.6E-204NF1L1	lm						epiphy:	unfused	vert		1	<1/4	1
-21.6E-204NF1L1	lm							indeterminate	vert		3	fragme	30
-21.6E-204NF1L1	lm							indeterminate	skull		7	fragme	18
-21.6E-204NF1L1	lm							indeterminate	long bone		30	fragme	158
-21.6E-204NF1L1	lm							indeterminate	rib/spine		15	fragme	37
-21.6E-204NF1L1	lm							indeterminate	indeterminate		12	fragme	14
-21.6E-204NF1L1	mm							indeterminate	long bone		81	fragme	45
-21.6E-204NF1L1	mm							indeterminate	rib/spine		67	fragme	26
-21.6E-204NF1L1	mm							indeterminate	skull		14	fragme	11
-21.6E-204NF1L1	mm							indeterminate	indeterminate		37	fragme	15
-21.6E-204NF1L1	Aves					bird		indeterminate	long bone		1	fragme	0
-21.6E-204NF1L1	Mammalia	Carnivora	Canidae	Canis		canis sp.		fused	phalanx		1	comple	0
-21.6E-204NF1L1	Osteichthyes					fish		fused	vert		3	comple	0
-21.6E-204NF1L1	sm/bird					sm/bird		indeterminate	skull		3	fragme	1
-21.6E-204NF1L1	unident							indeterminate	indeterminate			fragme	45
-21.6E-204NF1L1	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	fused	humerus		1	1/2	10
-21.6E-204NF1L1	lm						Distal	indeterminate	phalanx		1	<1/4	3
-21.6E-204NF1L1	Mammalia	Artiodactyla				L artiodactyl		fused	phalanx		1	1/2	5
-21.6E-204NF1L1	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	1/4	10
-21.6E-204NF1L1	lm							fused	sesamoid		1	comple	2
-21.6E-204NF1L1	Osteichthyes					L fish		fused	cleithrum		1	fragme	4
-21.6E-204NF1L1	Osteichthyes					fish		indeterminate	indeterminate		3	fragme	2
-21.6E-204NF1L1	mm							fused	costal cartilage		1	fragme	0
-21.6E-204NF1L1	Mammalia								tooth		8	fragme	3
-21.6E-204NF1L1	Mammalia							unerupted	tooth		1	fragme	1
-21.6E-204NF1L1	lm/mm							unfused	vert		5	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NL23		indeterminate	
-21.6E-204NF1L1	zebu	3rd Phalanx	DLS 55.17 Ld 43.17 MBS 19.13
-21.6E-204NF1L1	zebu	2nd phalanx	GL 38.71 Bp 26.44 Bd 23.41
-21.6E-204NF1L1		sesamoid	
-21.6E-204NF1L1	Indian Hare	3rd Phalanx	
-21.6E-204NF1L1	zebu/buffalo	scapula	
-21.6E-204NF1L1		1st phalanx	
-21.6E-204NF1L1		mandible	
-21.6E-204NF1L1		scapula	
-21.6E-204NF1L1		vert	
-21.6E-204NF1L1		vert	hack=1
-21.6E-204NF1L1		skull	
-21.6E-204NF1L1		long bone	b=1
-21.6E-204NF1L1		rib/spine	b=1
-21.6E-204NF1L1		indeterminate	
-21.6E-204NF1L1		long bone	b=5
-21.6E-204NF1L1		rib/spine	b=3
-21.6E-204NF1L1		skull	
-21.6E-204NF1L1		indeterminate	b=1
-21.6E-204NF1L1	bird	long bone	b=1
-21.6E-204NF1L1	canis sp.	phalanx	GL 14.32
-21.6E-204NF1L1	fish	vert	diam = 9.6, 7.2, 4
-21.6E-204NF1L1	sm/bird	skull	
-21.6E-204NF1L1		indeterminate	
-21.6E-204NF1L1	sheep/goat	humerus	
-21.6E-204NF1L1		phalanx	
-21.6E-204NF1L1	L artiodactyl	phalanx	
-21.6E-204NF1L1	L artiodactyl	metapodial	
-21.6E-204NF1L1		sesamoid	
-21.6E-204NF1L1	L fish	cleithrum	
-21.6E-204NF1L1	fish	indeterminate	
-21.6E-204NF1L1		costal cartilage	
-21.6E-204NF1L1		tooth	
-21.6E-204NF1L1		tooth	
-21.6E-204NF1L1		vert	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NF1L1	lm							indeterminate	skull		11	fragme	13
-21.6E-204NF1L1	lm							indeterminate	long bone		84	fragme	132
-21.6E-204NF1L1	lm							indeterminate	rib/spine		11	fragme	11
-21.6E-204NF1L1	lm							unfused	rib/spine		1	fragme	1
-21.6E-204NF1L1	lm							indeterminate	indeterminate		35	fragme	41
-21.6E-204NF1L1	mm							indeterminate	long bone		345	fragme	108
-21.6E-204NF1L1	mm							indeterminate	rib/spine		86	fragme	22
-21.6E-204NF1L1	mm							indeterminate	indeterminate		156	fragme	60
-21.6E-204NF1L1	mm							indeterminate	skull		7	fragme	4
-21.6E-204NF1L1	Osteichthyes					fish		indeterminate	vert		3	comple	0
-21.6E-204NF1L1	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	0
-21.6E-204NF1L1	sm							indeterminate	long bone		1	fragme	0
-21.6E-204NF1L1	unident							indeterminate	indeterminate			fragme	208
-21.6E-204NF1L1	lm						centrur	unfused	vert		1	fragme	1
-21.6E-204NF1L1	lm							indeterminate	long bone		6	fragme	3
-21.6E-204NF1L1	mm							indeterminate	long bone		2	fragme	0
-21.6E-204NF1L1	mm							indeterminate	indeterminate		5	fragme	1
-21.6E-204NF1L1flot	Reptilia	Testudines				turtle		fused	plastron		2	fragme	2
-21.6E-204NF1L1flot	Reptilia	Testudines				turtle		fused	vert		1	1/2	0
-21.6E-204NF1L1flot	Osteichthyes					fish		indeterminate	spine		2	fragme	0
-21.6E-204NF1L1flot	Osteichthyes					fish		indeterminate	vert		2	comple	0
-21.6E-204NF1L1flot	Osteichthyes					fish		indeterminate	skull		1	fragme	0
-21.6E-204NF1L1flot	sm							indeterminate	vert, caudal		2	fragme	0
-21.6E-204NF1L1flot	sm							indeterminate	rib		3	fragme	0
-21.6E-204NF1L1flot	sm							indeterminate	long bone		10	fragme	0
-21.6E-204NF1L1flot	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	tarsal 2/3	left	1	comple	7
-21.6E-204NF1L1flot	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	1/4	9
-21.6E-204NF1L1flot	Mammalia								antler		3	fragme	1
-21.6E-204NF1L1flot	Mammalia								tooth		7	fragme	2
-21.6E-204NF1L1flot	lm							unfused	vert		2	fragme	3
-21.6E-204NF1L1flot	lm							indeterminate	vert		5	fragme	7
-21.6E-204NF1L1flot	lm							indeterminate	skull		4	fragme	9
-21.6E-204NF1L1flot	lm							indeterminate	long bone		28	fragme	46
-21.6E-204NF1L1flot	lm							indeterminate	rib/spine		22	fragme	18
-21.6E-204NF1L1flot	lm							indeterminate	indeterminate		41	fragme	25

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NF1L1		skull	
-21.6E-204NF1L1		long bone	b=1
-21.6E-204NF1L1		rib/spine	
-21.6E-204NF1L1		rib/spine	
-21.6E-204NF1L1		indeterminate	
-21.6E-204NF1L1		long bone	b=2, c=1
-21.6E-204NF1L1		rib/spine	
-21.6E-204NF1L1		indeterminate	b=2
-21.6E-204NF1L1		skull	
-21.6E-204NF1L1	fish	vert	diam = 5
-21.6E-204NF1L1	softshell turtle	carapace	
-21.6E-204NF1L1		long bone	
-21.6E-204NF1L1		indeterminate	
-21.6E-204NF1L1		vert	
-21.6E-204NF1L1		long bone	b=2, c=2
-21.6E-204NF1L1		long bone	b=1
-21.6E-204NF1L1		indeterminate	
-21.6E-204NF1L1flot	turtle	plastron	
-21.6E-204NF1L1flot	turtle	vert	
-21.6E-204NF1L1flot	fish	spine	
-21.6E-204NF1L1flot	fish	vert	diam = 2.35
-21.6E-204NF1L1flot	fish	skull	
-21.6E-204NF1L1flot		vert, caudal	
-21.6E-204NF1L1flot		rib	
-21.6E-204NF1L1flot		long bone	
-21.6E-204NF1L1flot	zebu/buffalo	tarsal 2/3	
-21.6E-204NF1L1flot	L artiodactyl	metapodial	
-21.6E-204NF1L1flot		antler	
-21.6E-204NF1L1flot		tooth	
-21.6E-204NF1L1flot		vert	
-21.6E-204NF1L1flot		vert	
-21.6E-204NF1L1flot		skull	
-21.6E-204NF1L1flot		long bone	
-21.6E-204NF1L1flot		rib/spine	
-21.6E-204NF1L1flot		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NF1L1flot	mm							indeterminate	long bone		76	fragme	22
-21.6E-204NF1L1flot	mm							indeterminate	rib/spine		25	fragme	7
-21.6E-204NF1L1flot	mm							indeterminate	indeterminate		31	fragme	10
-21.6E-204NF1L1flot	unident							indeterminate	indeterminate			fragme	30
-21.6E-204NF3L1	unident							indeterminate	indeterminate			fragme	132
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	metatarsal		1	1/4	26
-21.6E-204NF3L1	lm						Distal	fused	humerus		1	1/4	31
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	patella	left	1	comple	20
-21.6E-204NF3L1	Mammalia	Artiodactyla				L artiodactyl		fused	2nd phalanx		1	1/2	4
-21.6E-204NF3L1	lm						epiphy	unfused	long bone		1	fragme	5
-21.6E-204NF3L1	lm						Proxim	fused	phalanx		1	<1/4	1
-21.6E-204NF3L1	lm							fused	mandible		1	1/4	18
-21.6E-204NF3L1	Mammalia								tooth		19	fragme	13
-21.6E-204NF3L1	lm							indeterminate	rib		1	fragme	0
-21.6E-204NF3L1	lm							indeterminate	vert		2	fragme	22
-21.6E-204NF3L1	mm							fused	costal cartilage		1	fragme	0
-21.6E-204NF3L1	lm							indeterminate	long bone		16	fragme	108
-21.6E-204NF3L1	lm							indeterminate	rib/spine		9	fragme	36
-21.6E-204NF3L1	lm							indeterminate	indeterminate		10	fragme	34
-21.6E-204NF3L1	mm							indeterminate	long bone		353	fragme	126
-21.6E-204NF3L1	mm							indeterminate	rib/spine		134	fragme	51
-21.6E-204NF3L1	mm							indeterminate	skull		25	fragme	18
-21.6E-204NF3L1	mm							indeterminate	indeterminate		133	fragme	60
-21.6E-204NF3L1	Osteichthyes					fish		fused	vert, caudal		1	comple	0
-21.6E-204NF3L1	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	plastron		1	fragme	0
-21.6E-204NF3L1	mm/sm							fused	vert, caudal		1	fragme	0
-21.6E-204NF3L1	mm/sm							indeterminate	vert		3	fragme	5
-21.6E-204NF3L1	Aves/Reptilia					bird/reptile		indeterminate	skull		13	fragme	13
-21.6E-204NF3L1	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		7	fragme	2
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			maxilla w/ mo	upper	1	fragme	90
-21.6E-204NF3L1	lm							fused	mandible		1	fragme	126
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	fused	1st phalanx		1	1/4	7
-21.6E-204NF3L1	lm/mm							indeterminate	skull		1	fragme	6
-21.6E-204NF3L1	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	phalanx		1	1/4	2
-21.6E-204NF3L1	lm							fused	sesamoid		1	comple	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NF1L1flot		long bone	
-21.6E-204NF1L1flot		rib/spine	b=3
-21.6E-204NF1L1flot		indeterminate	
-21.6E-204NF1L1flot		indeterminate	
-21.6E-204NF3L1		indeterminate	
-21.6E-204NF3L1	zebu/buffalo	metatarsal	Bd 46.85
-21.6E-204NF3L1		humerus	
-21.6E-204NF3L1	zebu/buffalo	patella	GL 54.98 GB 46.85
-21.6E-204NF3L1	L artiodactyl	2nd phalanx	
-21.6E-204NF3L1		long bone	
-21.6E-204NF3L1		phalanx	
-21.6E-204NF3L1		mandible	
-21.6E-204NF3L1		tooth	
-21.6E-204NF3L1		rib	dev=fetal/newborn
-21.6E-204NF3L1		vert	
-21.6E-204NF3L1		costal cartilage	
-21.6E-204NF3L1		long bone	
-21.6E-204NF3L1		rib/spine	
-21.6E-204NF3L1		indeterminate	
-21.6E-204NF3L1		long bone	b=2, cut=1
-21.6E-204NF3L1		rib/spine	
-21.6E-204NF3L1		skull	
-21.6E-204NF3L1		indeterminate	
-21.6E-204NF3L1	fish	vert, caudal	diam = 6.35
-21.6E-204NF3L1	softshell turtle	plastron	
-21.6E-204NF3L1		vert, caudal	
-21.6E-204NF3L1		vert	
-21.6E-204NF3L1	bird/reptile	skull	
-21.6E-204NF3L1	bird/reptile	indeterminate	
-21.6E-204NF3L1	zebu/buffalo	maxilla w/ mc	dev=adult
-21.6E-204NF3L1		mandible	
-21.6E-204NF3L1	zebu	1st phalanx	Bp 25.00
-21.6E-204NF3L1		skull	
-21.6E-204NF3L1	L artiodactyl	phalanx	
-21.6E-204NF3L1		sesamoid	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NF3L1	lm							fused	carpal/tarsal		1	comple	2
-21.6E-204NF3L1	lm							fused	carpal/tarsal		1	3/4	2
-21.6E-204NF3L1	mm							fused	costal cartilage		2	fragme	0
-21.6E-204NF3L1	lm/mm							fused	scapula		1	fragme	2
-21.6E-204NF3L1	Mammalia								tooth		16	fragme	24
-21.6E-204NF3L1	lm							indeterminate	vert		2	fragme	18
-21.6E-204NF3L1	lm							indeterminate	skull		7	fragme	14
-21.6E-204NF3L1	lm							indeterminate	long bone		13	fragme	39
-21.6E-204NF3L1	lm							indeterminate	rib/spine		23	fragme	65
-21.6E-204NF3L1	lm							indeterminate	indeterminate		6	fragme	10
-21.6E-204NF3L1	lm							indeterminate	rib		4	fragme	6
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	astragalus	left	1	comple	3
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	unfused	1st phalanx		1	comple	3
-21.6E-204NF3L1	lm						spine	indeterminate	vert		1	fragme	3
-21.6E-204NF3L1	lm/mm							indeterminate	indeterminate		2	fragme	1
-21.6E-204NF3L1	mm							indeterminate	long bone		111	fragme	62
-21.6E-204NF3L1	mm							indeterminate	rib/spine		47	fragme	17
-21.6E-204NF3L1	mm							indeterminate	indeterminate		88	fragme	50
-21.6E-204NF3L1	unident							indeterminate	indeterminate			fragme	109
-21.6E-204NF3L1	sm/bird					sm/bird		indeterminate	indeterminate		4	fragme	2
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	metatarsal	right	1	1/2	76
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	central tarsal	right	1	1/4	6
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	astragalus	right	1	1/4	10
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	tibia	right	1	<1/4	10
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	metatarsal	left	1	<1/4	12
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	central tarsal		1	<1/4	3
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	tarsal 2/3	right	1	comple	4
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	shaft	fused	metatarsal		5	fragme	23
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	tibia		5	fragme	6
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2nd phalanx	left	1	comple	11
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	distal sesamc	left	1	comple	2
-21.6E-204NF3L1	lm						Proxim	fused	1st phalanx		1	<1/4	4
-21.6E-204NF3L1	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metapodial		1	1/4	36
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	1st phalanx	right	1	comple	16
-21.6E-204NF3L1	lm							indeterminate	rib		55	fragme	68

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NF3L1		carpal/tarsal	
-21.6E-204NF3L1		carpal/tarsal	
-21.6E-204NF3L1		costal cartilage	
-21.6E-204NF3L1		scapula	
-21.6E-204NF3L1		tooth	
-21.6E-204NF3L1		vert	
-21.6E-204NF3L1		skull	
-21.6E-204NF3L1		long bone	
-21.6E-204NF3L1		rib/spine	
-21.6E-204NF3L1		indeterminate	b=1
-21.6E-204NF3L1		rib	dev=fetal/newborn
-21.6E-204NF3L1	zebu	astragalus	dev=fetal/newborn, GL1 27.92 GLm 26.46 D1 14.75
-21.6E-204NF3L1	zebu	1st phalanx	dev=fetal/newborn, Bp 21.41
-21.6E-204NF3L1		vert	
-21.6E-204NF3L1		indeterminate	dev=fetal/newborn
-21.6E-204NF3L1		long bone	b=1
-21.6E-204NF3L1		rib/spine	
-21.6E-204NF3L1		indeterminate	
-21.6E-204NF3L1		indeterminate	
-21.6E-204NF3L1	sm/bird	indeterminate	
-21.6E-204NF3L1	zebu/buffalo	metatarsal	Bp 42.18; articulated elements
-21.6E-204NF3L1	zebu/buffalo	central tarsal	articulated elements
-21.6E-204NF3L1	zebu/buffalo	astragalus	articulated elements
-21.6E-204NF3L1	zebu/buffalo	tibia	articulated elements
-21.6E-204NF3L1	zebu/buffalo	metatarsal	articulated elements
-21.6E-204NF3L1	zebu/buffalo	central tarsal	articulated elements
-21.6E-204NF3L1	zebu/buffalo	tarsal 2/3	articulated elements
-21.6E-204NF3L1	zebu/buffalo	metatarsal	articulated elements
-21.6E-204NF3L1	zebu/buffalo	tibia	articulated elements
-21.6E-204NF3L1	zebu	2nd phalanx	GL 39.42 Bp 27.33 Bd 25.21
-21.6E-204NF3L1	zebu	distal sesamoid	
-21.6E-204NF3L1		1st phalanx	
-21.6E-204NF3L1	L artiodactyl	metapodial	
-21.6E-204NF3L1	zebu	1st phalanx	GLPe 57.24 Bp 28.21 Bd 26.92, prox end perforated (possibly drilled)
-21.6E-204NF3L1		rib	part of SW bone concentration

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	calcaneus		1	1/2	33
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	fused	scapula		1	1/2	2
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	astragalus	left	1	comple	44
-21.6E-204NF3L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		1	fragme	20
-21.6E-204NF3L1	lm							indeterminate	accessory carpal		1	fragme	1
-21.6E-204NF3L1	lm							indeterminate	long bone		8	fragme	7
-21.6E-204NF3L1	mm							indeterminate	long bone		4	fragme	1
-21.6E-204NF3L1	unident							indeterminate	indeterminate			fragme	0
-21.6E-204NF3L1flot	Osteichthyes					fish		fused	spine		1	fragme	0
-21.6E-204NF3L1flot	Osteichthyes					fish		indeterminate	indeterminate		2	fragme	0
-21.6E-204NF3L1flot	sm							indeterminate	long bone		5	fragme	0
-21.6E-204NF3L1flot	Aves					bird		indeterminate	long bone		1	fragme	0
-21.6E-204NF3L1flot	Mammalia								antler		3	fragme	1
-21.6E-204NF3L1flot	mm							fused	costal cartilage		1	fragme	0
-21.6E-204NF3L1flot	Mammalia								tooth		4	fragme	0
-21.6E-204NF3L1flot	lm/mm							indeterminate	sesamoid		2	fragme	2
-21.6E-204NF3L1flot	lm							indeterminate	skull		6	fragme	5
-21.6E-204NF3L1flot	lm							indeterminate	long bone		29	fragme	28
-21.6E-204NF3L1flot	lm							indeterminate	rib/spine		9	fragme	17
-21.6E-204NF3L1flot	lm							indeterminate	indeterminate		36	fragme	22
-21.6E-204NF3L1flot	mm							indeterminate	long bone		93	fragme	21
-21.6E-204NF3L1flot	mm							indeterminate	rib/spine		28	fragme	5
-21.6E-204NF3L1flot	mm							indeterminate	indeterminate		41	fragme	8
-21.6E-204NF3L1flot	unident							indeterminate	indeterminate			fragme	39
-21.6E-204NF3L2	lm							fused	astragalus		1	1/2	14
-21.6E-204NF3L2	lm						Distal	fused	phalanx		2	1/4	11
-21.6E-204NF3L2	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		3	fragme	14
-21.6E-204NF3L2	Mammalia	Artiodactyla				L/m artiodact	Distal	fused	metapodial		4	fragme	8
-21.6E-204NF3L2	mm							fused	mandible		1	fragme	3
-21.6E-204NF3L2	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat			horn core		2	fragme	1
-21.6E-204NF3L2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	distal sesamoid		1	comple	1
-21.6E-204NF3L2	lm							unfused	sacrum		1	fragme	8
-21.6E-204NF3L2	lm/mm							unfused	skull		1	fragme	2
-21.6E-204NF3L2	mm							fused	axis		1	fragme	1
-21.6E-204NF3L2	lm							unfused	long bone		1	fragme	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NF3L1	zebu	calcaneus	part of SW bone concentration
-21.6E-204NF3L1	goat	scapula	GLP 28.93 Bg 20.10 LG 24.71; part of SW bone concentration
-21.6E-204NF3L1	zebu	astragalus	GL1 65.18, GLm 61.48, D1 33.45, Bd 40.20
-21.6E-204NF3L1	zebu/buffalo	horn core	
-21.6E-204NF3L1		accessory carpal	
-21.6E-204NF3L1		long bone	b=3, c=1
-21.6E-204NF3L1		long bone	pc=2
-21.6E-204NF3L1		indeterminate	
-21.6E-204NF3L1flot	fish	spine	
-21.6E-204NF3L1flot	fish	indeterminate	
-21.6E-204NF3L1flot		long bone	
-21.6E-204NF3L1flot	bird	long bone	
-21.6E-204NF3L1flot		antler	
-21.6E-204NF3L1flot		costal cartilage	
-21.6E-204NF3L1flot		tooth	
-21.6E-204NF3L1flot		sesamoid	
-21.6E-204NF3L1flot		skull	
-21.6E-204NF3L1flot		long bone	b=1
-21.6E-204NF3L1flot		rib/spine	
-21.6E-204NF3L1flot		indeterminate	
-21.6E-204NF3L1flot		long bone	b=2, c=1
-21.6E-204NF3L1flot		rib/spine	
-21.6E-204NF3L1flot		indeterminate	
-21.6E-204NF3L1flot		indeterminate	
-21.6E-204NF3L2		astragalus	
-21.6E-204NF3L2		phalanx	
-21.6E-204NF3L2	L artiodactyl	metapodial	
-21.6E-204NF3L2	L/m artiodactyl	metapodial	
-21.6E-204NF3L2		mandible	
-21.6E-204NF3L2	goat	horn core	
-21.6E-204NF3L2	zebu/buffalo	distal sesamoid	
-21.6E-204NF3L2		sacrum	
-21.6E-204NF3L2		skull	
-21.6E-204NF3L2		axis	
-21.6E-204NF3L2		long bone	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NF3L2	lm/mm							fused	scapula		7	fragme	12
-21.6E-204NF3L2	lm							indeterminate	vert		8	fragme	31
-21.6E-204NF3L2	lm							indeterminate	skull		3	fragme	6
-21.6E-204NF3L2	lm							indeterminate	long bone		36	fragme	88
-21.6E-204NF3L2	lm							indeterminate	rib/spine		12	fragme	18
-21.6E-204NF3L2	lm							indeterminate	indeterminate		11	fragme	17
-21.6E-204NF3L2	Mammalia								tooth		43	fragme	29
-21.6E-204NF3L2	mm							indeterminate	long bone		212	fragme	97
-21.6E-204NF3L2	mm							indeterminate	rib/spine		125	fragme	61
-21.6E-204NF3L2	mm							indeterminate	skull		23	fragme	15
-21.6E-204NF3L2	mm							indeterminate	indeterminate		83	fragme	89
-21.6E-204NF3L2	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		13	fragme	7
-21.6E-204NF3L2	unident							indeterminate	indeterminate			fragme	170
-21.6E-204NF3L2	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fusing	scapula	right	1	3/4+	81
-21.6E-204NF3L2	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal e	unfused	tibia	right	1	comple	21
-21.6E-204NF3L2	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metapodial		1	1/2	36
-21.6E-204NF3L2flot	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	intermediate c	right	1	comple	6
-21.6E-204NF3L2flot	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory ca	right	1	comple	2
-21.6E-204NF3L2flot	Mammalia								tooth		4	fragme	2
-21.6E-204NF3L2flot	lm							unfused	long bone		1	fragme	0
-21.6E-204NF3L2flot	lm							unfused	vert		1	fragme	4
-21.6E-204NF3L2flot	lm							indeterminate	vert		4	fragme	17
-21.6E-204NF3L2flot	lm/mm							indeterminate	vert		1	fragme	0
-21.6E-204NF3L2flot	lm							indeterminate	scapula		1	fragme	3
-21.6E-204NF3L2flot	Osteichthyes					fish		indeterminate	vert		1	comple	2
-21.6E-204NF3L2flot	lm							indeterminate	skull		10	fragme	17
-21.6E-204NF3L2flot	lm							indeterminate	long bone		6	fragme	13
-21.6E-204NF3L2flot	lm							indeterminate	rib/spine		5	fragme	6
-21.6E-204NF3L2flot	lm							indeterminate	indeterminate		11	fragme	5
-21.6E-204NF3L2flot	mm							indeterminate	long bone		27	fragme	7
-21.6E-204NF3L2flot	mm							indeterminate	rib/spine		6	fragme	2
-21.6E-204NF3L2flot	mm							indeterminate	indeterminate		18	fragme	4
-21.6E-204NF3L2flot	unident							indeterminate	indeterminate			fragme	14
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		10	fragme	22
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	fused	1st phalanx	left	2	comple	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NF3L2		scapula	
-21.6E-204NF3L2		vert	
-21.6E-204NF3L2		skull	
-21.6E-204NF3L2		long bone	b=6
-21.6E-204NF3L2		rib/spine	
-21.6E-204NF3L2		indeterminate	
-21.6E-204NF3L2		tooth	
-21.6E-204NF3L2		long bone	b=7, pc=1
-21.6E-204NF3L2		rib/spine	pc=3
-21.6E-204NF3L2		skull	b=1
-21.6E-204NF3L2		indeterminate	b=2, c=1
-21.6E-204NF3L2	bird/reptile	indeterminate	
-21.6E-204NF3L2		indeterminate	
-21.6E-204NF3L2	zebu	scapula	GLP 45.44 LG 38.22 BG 35.23 Ld 117.72
-21.6E-204NF3L2	zebu	tibia	Bd 66.08
-21.6E-204NF3L2	L artiodactyl	metapodial	
-21.6E-204NF3L2flot	zebu/buffalo	intermediate carpal	
-21.6E-204NF3L2flot	zebu/buffalo	accessory carpal	
-21.6E-204NF3L2flot		tooth	
-21.6E-204NF3L2flot		long bone	
-21.6E-204NF3L2flot		vert	
-21.6E-204NF3L2flot		vert	
-21.6E-204NF3L2flot		vert	
-21.6E-204NF3L2flot		scapula	
-21.6E-204NF3L2flot	fish	vert	diam = 24.43
-21.6E-204NF3L2flot		skull	
-21.6E-204NF3L2flot		long bone	
-21.6E-204NF3L2flot		rib/spine	inc=1
-21.6E-204NF3L2flot		indeterminate	
-21.6E-204NF3L2flot		long bone	
-21.6E-204NF3L2flot		rib/spine	
-21.6E-204NF3L2flot		indeterminate	
-21.6E-204NF3L2flot		indeterminate	
-21.6E-204NF3L3	zebu/buffalo	horn core	
-21.6E-204NF3L3	zebu	1st phalanx	Bp 22.51

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	1st phalanx	left	1	comple	21
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx		1	comple	21
-21.6E-204NF3L3	Osteichthyes					fish		fused	vert, caudal		2	comple	0
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fusing	metacarpal		2	1/2	35
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	frontal w/ horn core		1	fragme	12
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	metacarpal		1	1/4	15
-21.6E-204NF3L3	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		11	fragme	11
-21.6E-204NF3L3	lm						Proxim	fused	calcaneus		1	<1/4	6
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar		1	3/4	3
-21.6E-204NF3L3	lm							indeterminate	skull		1	fragme	15
-21.6E-204NF3L3	Mammalia							indeterminate	tooth		19	fragme	10
-21.6E-204NF3L3	lm/mm							fused	costal cartilage		4	fragme	2
-21.6E-204NF3L3	lm							fused	sesamoid		2	comple	2
-21.6E-204NF3L3	lm						Distal	fused	phalanx		1	1/4	2
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2/5 metacarpal		2	comple	2
-21.6E-204NF3L3	mm						blade	fused	scapula		2	fragme	5
-21.6E-204NF3L3	mm						epiphy	unfused	long bone		1	fragme	0
-21.6E-204NF3L3	Mammalia	Artiodactyla				M artiodactyl	shaft	fused	metapodial		1	fragme	1
-21.6E-204NF3L3	lm/mm							indeterminate	vert		5	fragme	20
-21.6E-204NF3L3	lm/mm							unfused	vert		2	fragme	6
-21.6E-204NF3L3	mm							indeterminate	ilium		1	fragme	2
-21.6E-204NF3L3	lm							indeterminate	skull		14	fragme	41
-21.6E-204NF3L3	lm							indeterminate	long bone		38	fragme	98
-21.6E-204NF3L3	lm							indeterminate	rib/spine		16	fragme	66
-21.6E-204NF3L3	lm							indeterminate	indeterminate		18	fragme	40
-21.6E-204NF3L3	mm							indeterminate	rib/spine		91	fragme	49
-21.6E-204NF3L3	mm							indeterminate	long bone		231	fragme	85
-21.6E-204NF3L3	mm							indeterminate	skull		37	fragme	30
-21.6E-204NF3L3	mm						blade	indeterminate	scapula		3	fragme	2
-21.6E-204NF3L3	mm							indeterminate	indeterminate		153	fragme	62
-21.6E-204NF3L3	sm/bird					sm/bird		indeterminate	skull		6	fragme	4
-21.6E-204NF3L3	Reptilia	Squamata				S snake		fused	vert		1	fragme	0
-21.6E-204NF3L3	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		3	fragme	0
-21.6E-204NF3L3	Aves					bird		indeterminate	long bone		2	fragme	1
-21.6E-204NF3L3	unident							indeterminate	indeterminate			fragme	134

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NF3L3	zebu	1st phalanx	GLPe 58.91 Bp 27.72 Bd 26.04, heavy muscle markings
-21.6E-204NF3L3	zebu/buffalo	3rd Phalanx	DLS 78.08 Ld 60.11 MBS 28.88, exostoses
-21.6E-204NF3L3	fish	vert, caudal	
-21.6E-204NF3L3	zebu	metacarpal	sf=1
-21.6E-204NF3L3	zebu/buffalo	frontal w/ horn core	
-21.6E-204NF3L3	zebu/buffalo	metacarpal	
-21.6E-204NF3L3	L artiodactyl	metapodial	
-21.6E-204NF3L3		calcaneus	
-21.6E-204NF3L3	zebu/buffalo	premolar	
-21.6E-204NF3L3		skull	
-21.6E-204NF3L3		tooth	
-21.6E-204NF3L3		costal cartilage	
-21.6E-204NF3L3		sesamoid	
-21.6E-204NF3L3		phalanx	
-21.6E-204NF3L3	zebu	2/5 metacarpal	
-21.6E-204NF3L3		scapula	
-21.6E-204NF3L3		long bone	
-21.6E-204NF3L3	M artiodactyl	metapodial	b=1
-21.6E-204NF3L3		vert	
-21.6E-204NF3L3		vert	
-21.6E-204NF3L3		ilium	
-21.6E-204NF3L3		skull	
-21.6E-204NF3L3		long bone	b=2
-21.6E-204NF3L3		rib/spine	b=1
-21.6E-204NF3L3		indeterminate	
-21.6E-204NF3L3		rib/spine	b=1
-21.6E-204NF3L3		long bone	b=12
-21.6E-204NF3L3		skull	
-21.6E-204NF3L3		scapula	
-21.6E-204NF3L3		indeterminate	b=4
-21.6E-204NF3L3	sm/bird	skull	
-21.6E-204NF3L3	S snake	vert	
-21.6E-204NF3L3	bird/reptile	indeterminate	
-21.6E-204NF3L3	bird	long bone	
-21.6E-204NF3L3		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NF3L3	lm							indeterminate	zygomatic	right	1	1/2	15
-21.6E-204NF3L3	lm							fused	scapula		4	1/4	8
-21.6E-204NF3L3	Mammalia	Artiodactyla				L artiodactyl	Distal	unfused	metapodial		1	fragme	22
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	metatarsal		1	<1/4	11
-21.6E-204NF3L3	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metacarpal		1	<1/4	15
-21.6E-204NF3L3	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		2	fragme	10
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	fused	1st phalanx		1	fragme	1
-21.6E-204NF3L3	mm						Proxim	unfused	phalanx		1	fragme	0
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		2	fragme	3
-21.6E-204NF3L3	Mammalia								antler		2	fragme	2
-21.6E-204NF3L3	lm						centrur	fused	vert		1	fragme	8
-21.6E-204NF3L3	mm							fused	costal cartilage		1	fragme	1
-21.6E-204NF3L3	mm						centrur	indeterminate	vert		1	<1/4	0
-21.6E-204NF3L3	lm							indeterminate	rib		2	fragme	6
-21.6E-204NF3L3	lm							indeterminate	long bone		1	fragme	0
-21.6E-204NF3L3	lm							fused	sesamoid		1	comple	0
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae			bovid		fused	accessory carpal		1	comple	0
-21.6E-204NF3L3	Mammalia	Artiodactyla	Bovidae			bovid		fused	intermediate carpal		1	comple	3
-21.6E-204NF3L3	lm							indeterminate	skull		10	fragme	19
-21.6E-204NF3L3	lm							indeterminate	long bone		46	fragme	113
-21.6E-204NF3L3	lm							indeterminate	rib/spine		27	fragme	50
-21.6E-204NF3L3	lm							indeterminate	indeterminate		24	fragme	28
-21.6E-204NF3L3	Mammalia								tooth		77	fragme	53
-21.6E-204NF3L3	Mammalia							unerupted	tooth		2	fragme	2
-21.6E-204NF3L3	mm							indeterminate	long bone		110	fragme	100
-21.6E-204NF3L3	mm							indeterminate	rib/spine		47	fragme	26
-21.6E-204NF3L3	mm							indeterminate	indeterminate		91	fragme	40
-21.6E-204NF3L3	mm							indeterminate	skull		22	fragme	14
-21.6E-204NF3L3	Osteichthyes					fish		fused	vert		4	comple	2
-21.6E-204NF3L3	Osteichthyes					fish		fused	dentary		1	1/2	0
-21.6E-204NF3L3	Osteichthyes	Siluriformes	Ictaluridae			Ritha		fused	dentary		2	fragme	0
-21.6E-204NF3L3	sm						spine	indeterminate	vert		1	fragme	0
-21.6E-204NF3L3	sm						Distal	fused	humerus		1	fragme	0
-21.6E-204NF3L3	sm							indeterminate	long bone		2	fragme	0
-21.6E-204NF3L3	sm							indeterminate	indeterminate		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NF3L3		zygomatic	
-21.6E-204NF3L3		scapula	
-21.6E-204NF3L3	L artiodactyl	metapodial	Bd 52.41
-21.6E-204NF3L3	zebu/buffalo	metatarsal	
-21.6E-204NF3L3	L artiodactyl	metacarpal	
-21.6E-204NF3L3	L artiodactyl	metapodial	
-21.6E-204NF3L3	goat	1st phalanx	b=1, Bd 10.49
-21.6E-204NF3L3		phalanx	
-21.6E-204NF3L3	zebu/buffalo	horn core	
-21.6E-204NF3L3		antler	
-21.6E-204NF3L3		vert	
-21.6E-204NF3L3		costal cartilage	
-21.6E-204NF3L3		vert	
-21.6E-204NF3L3		rib	dev=fetal/newborn
-21.6E-204NF3L3		long bone	dev=fetal/newborn
-21.6E-204NF3L3		sesamoid	dev=fetal/newborn
-21.6E-204NF3L3	bovid	accessory carpal	
-21.6E-204NF3L3	bovid	intermediate carpal	
-21.6E-204NF3L3		skull	
-21.6E-204NF3L3		long bone	b=1, pc=4, c=1
-21.6E-204NF3L3		rib/spine	b=2
-21.6E-204NF3L3		indeterminate	
-21.6E-204NF3L3		tooth	
-21.6E-204NF3L3		tooth	
-21.6E-204NF3L3		long bone	b=11
-21.6E-204NF3L3		rib/spine	
-21.6E-204NF3L3		indeterminate	b=2
-21.6E-204NF3L3		skull	
-21.6E-204NF3L3	fish	vert	diam = 24.8, 6.2
-21.6E-204NF3L3	fish	dentary	
-21.6E-204NF3L3	Ritha	dentary	
-21.6E-204NF3L3		vert	
-21.6E-204NF3L3		humerus	
-21.6E-204NF3L3		long bone	
-21.6E-204NF3L3		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-21.6E-204NF3L3	Aves					bird		indeterminate	indeterminate		7	fragme	3
-21.6E-204NF3L3	unident							indeterminate	indeterminate			fragme	121
-21.6E-204NF4	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		fused	1st phalanx		1	3/4	0
-21.6E-204NF4	Osteichthyes					fish		indeterminate	skull		2	fragme	1
-21.6E-204NF4	sm							indeterminate	long bone		1	fragme	0
-21.6E-204NF4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory carpal		1	3/4	1
-21.6E-204NF4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar		1	3/4	24
-21.6E-204NF4	Mammalia								antler		3	fragme	4
-21.6E-204NF4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx	left	1	1/2	12
-21.6E-204NF4	lm						spine	indeterminate	vert		1	fragme	2
-21.6E-204NF4	lm							indeterminate	vert		8	fragme	24
-21.6E-204NF4	Mammalia								tooth		29	fragme	18
-21.6E-204NF4	lm							unfused	long bone		1	fragme	0
-21.6E-204NF4	lm							indeterminate	skull		17	fragme	28
-21.6E-204NF4	lm							indeterminate	scapula		5	fragme	23
-21.6E-204NF4	lm							indeterminate	long bone		53	fragme	117
-21.6E-204NF4	lm							indeterminate	rib/spine		30	fragme	27
-21.6E-204NF4	lm							indeterminate	indeterminate		31	fragme	22
-21.6E-204NF4	mm							indeterminate	long bone		110	fragme	3
-21.6E-204NF4	mm							indeterminate	rib/spine		29	fragme	9
-21.6E-204NF4	mm							indeterminate	skull		5	fragme	2
-21.6E-204NF4	mm							indeterminate	indeterminate		29	fragme	9
-21.6E-204NF4	unident							indeterminate	indeterminate			fragme	77
-24E-86NL1	lm							indeterminate	indeterminate		1	fragme	3
-24E-88NL2	lm							indeterminate	long bone		15	fragme	16
-24E-88NL2	lm							indeterminate	rib/spine		6	fragme	6
-24E-88NL2	lm							indeterminate	indeterminate		16	fragme	9
-24E-88NL2	mm							indeterminate	long bone		21	fragme	7
-24E-88NL2	mm							indeterminate	rib/spine		25	fragme	6
-24E-88NL2	Mammalia								tooth		3	fragme	0
-24E-88NL2	Mammalia							fused	vert		1	<1/4	2
-24E-88NL2	unident							indeterminate	indeterminate			fragme	10
-24E-90NF10L1	mm							indeterminate	indeterminate		3	fragme	1
-24E-90NF10L1	mm							indeterminate	rib/spine		1	fragme	0
-24E-90NF10L1	mm							indeterminate	long bone		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-21.6E-204NF3L3	bird	indeterminate	
-21.6E-204NF3L3		indeterminate	
-21.6E-204NF4	Indian Hare	1st phalanx	GL 12.92
-21.6E-204NF4	fish	skull	
-21.6E-204NF4		long bone	
-21.6E-204NF4	zebu/buffalo	accessory carpal	
-21.6E-204NF4	zebu/buffalo	molar	
-21.6E-204NF4		antler	
-21.6E-204NF4	zebu/buffalo	3rd Phalanx	
-21.6E-204NF4		vert	dev=fetal/newborn
-21.6E-204NF4		vert	
-21.6E-204NF4		tooth	
-21.6E-204NF4		long bone	
-21.6E-204NF4		skull	
-21.6E-204NF4		scapula	
-21.6E-204NF4		long bone	b=1
-21.6E-204NF4		rib/spine	
-21.6E-204NF4		indeterminate	b=1
-21.6E-204NF4		long bone	
-21.6E-204NF4		rib/spine	
-21.6E-204NF4		skull	
-21.6E-204NF4		indeterminate	
-21.6E-204NF4		indeterminate	
-24E-86NL1		indeterminate	
-24E-88NL2		long bone	b=4, c=1
-24E-88NL2		rib/spine	b=1
-24E-88NL2		indeterminate	b=1
-24E-88NL2		long bone	b=4, c=1
-24E-88NL2		rib/spine	b=6, c=1
-24E-88NL2		tooth	b=1
-24E-88NL2		vert	
-24E-88NL2		indeterminate	
-24E-90NF10L1		indeterminate	
-24E-90NF10L1		rib/spine	hack=1
-24E-90NF10L1		long bone	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-24E-90NF10L1	unident							indeterminate	indeterminate			fragme	0
-24E-90NF10L1flot	mm							indeterminate	long bone		1	fragme	0
-24E-90NF10L1flot	unident							indeterminate	indeterminate			fragme	1
-24E-90NF11L1	lm							indeterminate	long bone		2	fragme	17
-24E-90NF11L1	mm							fused	costal cartilage		1	fragme	0
-24E-90NF11L1	lm							indeterminate	indeterminate		3	fragme	5
-24E-90NF11L1	mm							indeterminate	long bone		18	fragme	7
-24E-90NF11L1	mm							indeterminate	rib/spine		2	fragme	0
-24E-90NF11L1	mm							indeterminate	indeterminate		6	fragme	2
-24E-90NF11L1	mm							unfused	indeterminate		1	fragme	0
-24E-90NF11L1	sm/bird					sm/bird		indeterminate	skull		1	fragme	0
-24E-90NF11L1	unident							indeterminate	indeterminate			fragme	0
-24E-90NF11L1flot	mm							indeterminate	long bone		5	fragme	2
-24E-90NF11L1flot	mm							indeterminate	rib/spine		4	fragme	0
-24E-90NF11L1flot	unident							indeterminate	indeterminate			fragme	0
-24E-90NF12L1flot	Mammalia								tooth		6	fragme	1
-24E-90NF12L1flot	lm/mm							indeterminate	skull		8	fragme	2
-24E-90NF12L1flot	lm							indeterminate	long bone		5	fragme	2
-24E-90NF12L1flot	lm							indeterminate	indeterminate		2	fragme	1
-24E-90NF12L1flot	mm							indeterminate	long bone		7	fragme	1
-24E-90NF12L1flot	mm							indeterminate	rib/spine		1	fragme	0
-24E-90NF12L1flot	unident							indeterminate	indeterminate			fragme	3
-24E-90NF12L1PP2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	maxilla	left	1	3/4	187
-24E-90NF13L1flot	Mammalia								antler		53	fragme	10
-24E-90NF13L1flot	lm							indeterminate	long bone		1	fragme	3
-24E-90NF13L1flot	lm							indeterminate	rib/spine		4	fragme	2
-24E-90NF13L1flot	lm							indeterminate	indeterminate		4	fragme	3
-24E-90NF13L1flot	mm							indeterminate	long bone		15	fragme	2
-24E-90NF13L1flot	mm							indeterminate	rib/spine		3	fragme	0
-24E-90NF13L1flot	mm							indeterminate	indeterminate		3	fragme	1
-24E-90NF13L1flot	unident							indeterminate	indeterminate			fragme	1
-24E-90NF13topflot	Mammalia								antler		28	fragme	5
-24E-90NF13topflot	lm							indeterminate	indeterminate		3	fragme	5
-24E-90NF13topflot	mm							indeterminate	long bone		3	fragme	0
-24E-90NF13topflot	mm							indeterminate	indeterminate		6	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-90NF10L1		indeterminate	
-24E-90NF10L1flot		long bone	
-24E-90NF10L1flot		indeterminate	
-24E-90NF11L1		long bone	cut=1
-24E-90NF11L1		costal cartilag	b=1
-24E-90NF11L1		indeterminate	hack=1
-24E-90NF11L1		long bone	b=8, c=2
-24E-90NF11L1		rib/spine	b=1
-24E-90NF11L1		indeterminate	
-24E-90NF11L1		indeterminate	
-24E-90NF11L1	sm/bird	skull	
-24E-90NF11L1		indeterminate	
-24E-90NF11L1flot		long bone	b=1
-24E-90NF11L1flot		rib/spine	b=1
-24E-90NF11L1flot		indeterminate	
-24E-90NF12L1flot		tooth	b=1
-24E-90NF12L1flot		skull	
-24E-90NF12L1flot		long bone	c=2
-24E-90NF12L1flot		indeterminate	c=2
-24E-90NF12L1flot		long bone	c=2
-24E-90NF12L1flot		rib/spine	
-24E-90NF12L1flot		indeterminate	
-24E-90NF12L1PP2	zebu/buffalo	maxilla	dev=subadult, maxilla w/ M3 - P2, molar row L=79.97
-24E-90NF13L1flot		antler	
-24E-90NF13L1flot		long bone	
-24E-90NF13L1flot		rib/spine	
-24E-90NF13L1flot		indeterminate	
-24E-90NF13L1flot		long bone	b=3
-24E-90NF13L1flot		rib/spine	
-24E-90NF13L1flot		indeterminate	
-24E-90NF13L1flot		indeterminate	
-24E-90NF13topflot		antler	w=2
-24E-90NF13topflot		indeterminate	b=2
-24E-90NF13topflot		long bone	b=1
-24E-90NF13topflot		indeterminate	b=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-24E-90NF13topflot	unident							indeterminate	indeterminate			fragme	1
-24E-90NF3L1flot	sm							indeterminate	phalanx		1	comple	0
-24E-90NF3L1flot	mm							indeterminate	long bone		11	fragme	2
-24E-90NF3L1flot	Mammalia								tooth		1	fragme	0
-24E-90NF3L1flot	mm							indeterminate	indeterminate		2	fragme	0
-24E-90NF3L1flot	mm							indeterminate	rib/spine		2	fragme	0
-24E-90NF3L1flot	unident							indeterminate	indeterminate			fragme	1
-24E-90NF3L2	mm							indeterminate	long bone		12	fragme	3
-24E-90NF5L1flot	mm							indeterminate	long bone		8	fragme	1
-24E-90NF5L1flot	unident							indeterminate	indeterminate			fragme	0
-24E-90NF5L2	mm							indeterminate	long bone		6	fragme	1
-24E-90NF5L2	mm							indeterminate	indeterminate		2	fragme	2
-24E-90NF9L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	astragalus	right	1	comple	72
-24E-90NF9L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	1st phalanx	right	1	1/2	12
-24E-90NF9L1	lm						Proxim	fused	humerus		1	1/4	28
-24E-90NF9L1	mm						Distal	fused	phalanx		1	1/4	1
-24E-90NF9L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory carpal		1	comple	2
-24E-90NF9L1	lm							fused	sesamoid		1	comple	3
-24E-90NF9L1	mm						Proxim	unfused	phalanx		1	1/2	0
-24E-90NF9L1	mm						Proxim	fused	femur		1	fragme	4
-24E-90NF9L1	Mammalia								antler		3	fragme	1
-24E-90NF9L1	Mammalia	Rodentia				rat/mouse		fused	mandible	right	1	fragme	0
-24E-90NF9L1	sm							indeterminate	long bone		1	1/2	0
-24E-90NF9L1	Mammalia								tooth		5	fragme	5
-24E-90NF9L1	lm							indeterminate	vert		3	fragme	29
-24E-90NF9L1	mm							indeterminate	vert		7	fragme	12
-24E-90NF9L1	mm							unfused	scapula		1	fragme	0
-24E-90NF9L1	Reptilia	Testudines				turtle		fused	carapace		1	fragme	1
-24E-90NF9L1	Reptilia	Testudines				turtle		fused	scapula		1	fragme	0
-24E-90NF9L1	Aves					bird		indeterminate	long bone		3	fragme	1
-24E-90NF9L1	lm							indeterminate	skull		7	fragme	11
-24E-90NF9L1	lm							indeterminate	long bone		36	fragme	123
-24E-90NF9L1	lm							indeterminate	rib/spine		28	fragme	47
-24E-90NF9L1	lm							indeterminate	rib		1	fragme	6
-24E-90NF9L1	lm							indeterminate	indeterminate		37	fragme	65

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-90NF13topflot		indeterminate	
-24E-90NF3L1flot		phalanx	GL 5.03
-24E-90NF3L1flot		long bone	b=1, c=1
-24E-90NF3L1flot		tooth	
-24E-90NF3L1flot		indeterminate	b=1, c=1
-24E-90NF3L1flot		rib/spine	
-24E-90NF3L1flot		indeterminate	
-24E-90NF3L2		long bone	b=1, c=1
-24E-90NF5L1flot		long bone	b=1
-24E-90NF5L1flot		indeterminate	
-24E-90NF5L2		long bone	
-24E-90NF5L2		indeterminate	b=1
-24E-90NF9L1	zebu	astragalus	D1 39.79 Bd 51.23 GL1 71.94 GLm 66.93
-24E-90NF9L1	zebu/buffalo	1st phalanx	Bp 29.97
-24E-90NF9L1		humerus	hack=1
-24E-90NF9L1		phalanx	
-24E-90NF9L1	zebu/buffalo	accessory carpal	
-24E-90NF9L1		sesamoid	
-24E-90NF9L1		phalanx	
-24E-90NF9L1		femur	
-24E-90NF9L1		antler	
-24E-90NF9L1	rat/mouse	mandible	
-24E-90NF9L1		long bone	
-24E-90NF9L1		tooth	b=1
-24E-90NF9L1		vert	
-24E-90NF9L1		vert	c=1
-24E-90NF9L1		scapula	dev=fetal/newborn
-24E-90NF9L1	turtle	carapace	poorly formed
-24E-90NF9L1	turtle	scapula	c=1
-24E-90NF9L1	bird	long bone	
-24E-90NF9L1		skull	pc=1
-24E-90NF9L1		long bone	pc=9, c=3
-24E-90NF9L1		rib/spine	b=4
-24E-90NF9L1		rib	
-24E-90NF9L1		indeterminate	b=8, c=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-24E-90NF9L1	mm							indeterminate	long bone		118	fragme	51
-24E-90NF9L1	mm							indeterminate	rib/spine		88	fragme	39
-24E-90NF9L1	mm							indeterminate	skull		27	fragme	14
-24E-90NF9L1	mm							indeterminate	indeterminate		38	fragme	27
-24E-90NF9L1	unident							indeterminate	indeterminate			fragme	134
-24E-90NF9L2	sm							indeterminate	long bone		1	fragme	0
-24E-90NF9L2	Mammalia								tooth		4	fragme	0
-24E-90NF9L2	Mammalia								antler		3	fragme	1
-24E-90NF9L2	lm						Distal	indeterminate	phalanx		1	1/4	1
-24E-90NF9L2	lm							indeterminate	long bone		7	fragme	11
-24E-90NF9L2	lm							indeterminate	rib/spine		4	fragme	2
-24E-90NF9L2	lm/mm							indeterminate	indeterminate		1	fragme	1
-24E-90NF9L2	mm							indeterminate	long bone		24	fragme	8
-24E-90NF9L2	mm							indeterminate	rib/spine		6	fragme	2
-24E-90NF9L2	unident							indeterminate	indeterminate			fragme	6
-24E-90NF9L2PP2	lm						shaft	indeterminate	long bone		1	fragme	157
-24E-90NL10	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	2/5 metacarpal		1	comple	1
-24E-90NL10	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	1st phalanx		1	1/4	6
-24E-90NL10	mm						Proxim	unfused	phalanx		2	1/4	6
-24E-90NL10	mm						Distal	fused	phalanx		1	1/2	1
-24E-90NL10	Mammalia	Artiodactyla				M artiodactyl	Distal	fused	metapodial		1	1/2	1
-24E-90NL10	Mammalia	Artiodactyla				L ruminant			molar		1	comple	11
-24E-90NL10	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar		1	comple	5
-24E-90NL10	Mammalia								antler		3	fragme	2
-24E-90NL10	Mammalia								tooth		19	fragme	5
-24E-90NL10	lm							indeterminate	skull		14	fragme	23
-24E-90NL10	lm							indeterminate	vert		2	fragme	4
-24E-90NL10	lm							indeterminate	long bone		45	fragme	127
-24E-90NL10	lm							indeterminate	rib/spine		28	fragme	51
-24E-90NL10	lm							indeterminate	indeterminate		23	fragme	30
-24E-90NL10	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		2	fragme	0
-24E-90NL10	mm							indeterminate	long bone		145	fragme	68
-24E-90NL10	mm							indeterminate	rib/spine		58	fragme	19
-24E-90NL10	mm							indeterminate	skull		10	fragme	5
-24E-90NL10	unident							indeterminate	indeterminate			fragme	101

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-90NF9L1		long bone	b=30, c=4
-24E-90NF9L1		rib/spine	b=20, c=1
-24E-90NF9L1		skull	c=2
-24E-90NF9L1		indeterminate	b=7, c=4
-24E-90NF9L1		indeterminate	
-24E-90NF9L2		long bone	b=1
-24E-90NF9L2		tooth	
-24E-90NF9L2		antler	b=2
-24E-90NF9L2		phalanx	b=1
-24E-90NF9L2		long bone	b=1, c=3
-24E-90NF9L2		rib/spine	b=1
-24E-90NF9L2		indeterminate	
-24E-90NF9L2		long bone	b=3, pc=1, c=2
-24E-90NF9L2		rib/spine	c=2
-24E-90NF9L2		indeterminate	
-24E-90NF9L2PP2		long bone	
-24E-90NL10	zebu	2/5 metacarpal	
-24E-90NL10	zebu/buffalo	1st phalanx	
-24E-90NL10		phalanx	
-24E-90NL10		phalanx	
-24E-90NL10	M artiodactyl	metapodial	b=1
-24E-90NL10	L ruminant	molar	dev=old adult, very worn and alvelous resorbed
-24E-90NL10	zebu/buffalo	premolar	dev=old adult, very worn and alvelous resorbed
-24E-90NL10		antler	b=2
-24E-90NL10		tooth	
-24E-90NL10		skull	
-24E-90NL10		vert	pc=1
-24E-90NL10		long bone	b=7, pc=2
-24E-90NL10		rib/spine	b=7, pc=2, c=1
-24E-90NL10		indeterminate	b=3
-24E-90NL10	bird/reptile	indeterminate	
-24E-90NL10		long bone	b=42, pc=6, c=14
-24E-90NL10		rib/spine	b=8, c=3
-24E-90NL10		skull	
-24E-90NL10		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-24E-90NL11	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	3rd Phalanx		1	comple	8
-24E-90NL11	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	astragalus		1	3/4	3
-24E-90NL11	Reptilia	Sauria				lizard		fused	vert		1	comple	0
-24E-90NL11	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	9
-24E-90NL11	mm						Distal	fused	phalanx		1	1/2	1
-24E-90NL11	lm							fused	costal cartilage		1	fragme	3
-24E-90NL11	Mammalia	Rodentia				rat/mouse		fused	mandible	right	1	comple	0
-24E-90NL11	lm								incisor		1	fragme	2
-24E-90NL11	lm							indeterminate	vert		3	fragme	13
-24E-90NL11	Mammalia								tooth		5	fragme	2
-24E-90NL11	Aves					bird		indeterminate	long bone		4	fragme	1
-24E-90NL11	lm							indeterminate	skull		7	fragme	8
-24E-90NL11	lm							indeterminate	long bone		23	fragme	103
-24E-90NL11	lm							indeterminate	indeterminate		10	fragme	19
-24E-90NL11	lm							indeterminate	rib/spine		7	fragme	11
-24E-90NL11	mm							indeterminate	long bone		78	fragme	38
-24E-90NL11	mm							indeterminate	rib/spine		43	fragme	15
-24E-90NL11	mm							indeterminate	indeterminate		57	fragme	31
-24E-90NL11	mm							indeterminate	skull		8	fragme	5
-24E-90NL11	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		3	fragme	1
-24E-90NL11	sm							indeterminate	indeterminate		4	fragme	0
-24E-90NL11	unident							indeterminate	indeterminate			fragme	75
-24E-90NL2	lm							indeterminate	long bone		35	fragme	45
-24E-90NL2	lm							indeterminate	rib/spine		4	fragme	3
-24E-90NL2	lm/mm							indeterminate	indeterminate		19	fragme	20
-24E-90NL2	mm							indeterminate	long bone		49	fragme	23
-24E-90NL2	mm							indeterminate	rib/spine		36	fragme	12
-24E-90NL2	mm							indeterminate	skull		2	fragme	1
-24E-90NL2	Mammalia								tooth		9	fragme	3
-24E-90NL2	Aves					bird		indeterminate	long bone		2	fragme	0
-24E-90NL2	unident							indeterminate	indeterminate			fragme	44
-24E-90NL3	lm							indeterminate	long bone		4	fragme	4
-24E-90NL3	lm						Distal	indeterminate	phalanx		2	<1/4	2
-24E-90NL3	Mammalia								tooth		6	fragme	2
-24E-90NL3	mm							indeterminate	long bone		24	fragme	5

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-90NL11	zebu	3rd Phalanx	DLS 51.85 Ld 40.64 MBS 17.99
-24E-90NL11	sheep/goat/de	astragalus	dev=fetal/newborn, GL1 29.38 D1 14.87 Dm 15.28
-24E-90NL11	lizard	vert	
-24E-90NL11	L artiodactyl	metapodial	cut=1
-24E-90NL11		phalanx	
-24E-90NL11		costal cartilag	b=1
-24E-90NL11	rat/mouse	mandible	
-24E-90NL11		incisor	dev=adult
-24E-90NL11		vert	cut=1
-24E-90NL11		tooth	
-24E-90NL11	bird	long bone	b=3
-24E-90NL11		skull	
-24E-90NL11		long bone	b=3
-24E-90NL11		indeterminate	b=2
-24E-90NL11		rib/spine	b=1, pc=1, cut=1
-24E-90NL11		long bone	b=15, pc=2, c=4
-24E-90NL11		rib/spine	b=11, c=13
-24E-90NL11		indeterminate	b=7, c=4
-24E-90NL11		skull	
-24E-90NL11	bird/reptile	indeterminate	
-24E-90NL11		indeterminate	
-24E-90NL11		indeterminate	
-24E-90NL2		long bone	b=2
-24E-90NL2		rib/spine	b=2
-24E-90NL2		indeterminate	b=7
-24E-90NL2		long bone	b=12, c=1
-24E-90NL2		rib/spine	b=13
-24E-90NL2		skull	
-24E-90NL2		tooth	
-24E-90NL2	bird	long bone	
-24E-90NL2		indeterminate	
-24E-90NL3		long bone	
-24E-90NL3		phalanx	
-24E-90NL3		tooth	
-24E-90NL3		long bone	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-24E-90NL3	mm							indeterminate	rib/spine		5	fragme	0
-24E-90NL3	mm							indeterminate	indeterminate		7	fragme	2
-24E-90NL3	unident							indeterminate	indeterminate			fragme	2
-24E-90NL4	lm						Distal	fused	1st phalanx		1	1/4	5
-24E-90NL4	lm						Distal	fused	phalanx		1	<1/4	4
-24E-90NL4	lm						Proxim	unfused	1st phalanx		1	1/4	3
-24E-90NL4	lm							fused	calcaneus		1	<1/4	7
-24E-90NL4	lm							unfused	2nd phalanx		1	1/2	5
-24E-90NL4	mm						Distal	fused	phalanx		1	<1/4	0
-24E-90NL4	lm							fused	sesamoid		1	comple	2
-24E-90NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	epiphy	unfused	radius		1	comple	2
-24E-90NL4	lm							indeterminate	long bone		1	fragme	0
-24E-90NL4	mm							fused	petris temporal		3	fragme	0
-24E-90NL4	Mammalia								tooth		15	fragme	3
-24E-90NL4	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer			molar		1	1/2	0
-24E-90NL4	mm							unerupted	incisor		1	comple	0
-24E-90NL4	mm						epiphy	unfused	vert		1	1/2	1
-24E-90NL4	Aves					L bird		indeterminate	long bone		8	fragme	5
-24E-90NL4	Aves					bird		indeterminate	long bone		11	fragme	2
-24E-90NL4	Reptilia	Testudines	Emydidae			box turtle		fused	vert		1	1/2	0
-24E-90NL4	lm							indeterminate	long bone		79	fragme	99
-24E-90NL4	lm							indeterminate	rib/spine		46	fragme	53
-24E-90NL4	lm							indeterminate	indeterminate		28	fragme	43
-24E-90NL4	mm							indeterminate	long bone		189	fragme	53
-24E-90NL4	mm							indeterminate	rib/spine		78	fragme	42
-24E-90NL4	mm							indeterminate	indeterminate		77	fragme	20
-24E-90NL4	sm							indeterminate	long bone		19	fragme	2
-24E-90NL4	unident							indeterminate	indeterminate			fragme	92
-24E-90NL5	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	astragalus		1	comple	50
-24E-90NL5	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	phalanx		2	1/4	4
-24E-90NL5	Mammalia								antler		2	fragme	1
-24E-90NL5	lm						epiphy	unfused	vert		1	fragme	2
-24E-90NL5	Mammalia								tooth		7	fragme	2
-24E-90NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			M1	lower	1	3/4	3
-24E-90NL5	lm							indeterminate	long bone		21	fragme	55

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-90NL3		rib/spine	
-24E-90NL3		indeterminate	b=1, c=1
-24E-90NL3		indeterminate	
-24E-90NL4		1st phalanx	
-24E-90NL4		phalanx	cut=1
-24E-90NL4		1st phalanx	
-24E-90NL4		calcaneus	
-24E-90NL4		2nd phalanx	
-24E-90NL4		phalanx	
-24E-90NL4		sesamoid	
-24E-90NL4	zebu/buffalo	radius	
-24E-90NL4		long bone	dev=fetal/newborn
-24E-90NL4		petris temporal	
-24E-90NL4		tooth	b=1
-24E-90NL4	sheep/goat/de	molar	
-24E-90NL4		incisor	
-24E-90NL4		vert	
-24E-90NL4	L bird	long bone	
-24E-90NL4	bird	long bone	b=1
-24E-90NL4	box turtle	vert	
-24E-90NL4		long bone	b=3, cut=1
-24E-90NL4		rib/spine	b=3, cut=1
-24E-90NL4		indeterminate	b=6, pc=3, cut=1
-24E-90NL4		long bone	b=14, pc=6, c=4
-24E-90NL4		rib/spine	b=21, pc=5
-24E-90NL4		indeterminate	b=7, c=2
-24E-90NL4		long bone	b=3
-24E-90NL4		indeterminate	
-24E-90NL5	zebu	astragalus	GL1 70.71 GLm 64.78 D1 38.23 Bd 44.04
-24E-90NL5	L artiodactyl	phalanx	
-24E-90NL5		antler	
-24E-90NL5		vert	
-24E-90NL5		tooth	
-24E-90NL5	sheep/goat	M1	dev=g
-24E-90NL5		long bone	b=4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-24E-90NL5	lm							indeterminate	rib/spine		7	fragme	6
-24E-90NL5	lm							indeterminate	indeterminate		5	fragme	15
-24E-90NL5	mm							indeterminate	long bone		62	fragme	24
-24E-90NL5	mm							indeterminate	rib/spine		56	fragme	19
-24E-90NL5	mm							indeterminate	indeterminate		43	fragme	19
-24E-90NL5	mm							indeterminate	skull		2	fragme	0
-24E-90NL5	unident							indeterminate	indeterminate			fragme	73
-24E-90NL6	lm							fused	acetabulum		1	1/4	5
-24E-90NL6	Mammalia	Artiodactyla				M artiodactyl	shaft	fused	metapodial		1	<1/4	0
-24E-90NL6	lm/mm							indeterminate	vert		1	<1/4	0
-24E-90NL6	Mammalia	Artiodactyla				M artiodactyl		fused	3rd Phalanx		1	<1/4	0
-24E-90NL6	mm						Distal	indeterminate	phalanx		1	<1/4	0
-24E-90NL6	mm							fused	petris temporal		1	fragme	0
-24E-90NL6	Mammalia								tooth		35	fragme	15
-24E-90NL6	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			M3		1	3/4	1
-24E-90NL6	Mammalia	Artiodactyla	Suidae	Sus		pig			premolar		1	3/4	0
-24E-90NL6	lm								molar		2	<1/4	2
-24E-90NL6	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		unerupted	molar		1	fragme	0
-24E-90NL6	Aves					bird		indeterminate	long bone		7	fragme	2
-24E-90NL6	lm							indeterminate	long bone		11	fragme	24
-24E-90NL6	lm							indeterminate	rib/spine		2	fragme	2
-24E-90NL6	lm							indeterminate	indeterminate		9	fragme	17
-24E-90NL6	mm							indeterminate	long bone		79	fragme	43
-24E-90NL6	mm							indeterminate	rib/spine		42	fragme	15
-24E-90NL6	mm							indeterminate	skull		3	fragme	1
-24E-90NL6	mm							indeterminate	indeterminate		37	fragme	14
-24E-90NL6	unident							indeterminate	indeterminate			fragme	69
-24E-90NL9	mm							indeterminate	zygomatic	left	1	1/4	3
-24E-90NL9	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			incisor		1	comple	3
-24E-90NL9	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Proxim	fused	2nd phalanx		1	1/2	0
-24E-90NL9	Mammalia	Artiodactyla				M artiodactyl	Distal	fused	metapodial		4	fragme	1
-24E-90NL9	Mammalia	Artiodactyla				M artiodactyl	Distal	fused	phalanx		1	1/4	0
-24E-90NL9	Mammalia								antler		2	fragme	2
-24E-90NL9	mm						centrur	indeterminate	vert		1	<1/4	0
-24E-90NL9	Mammalia								tooth		15	fragme	8

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-90NL5		rib/spine	b=1
-24E-90NL5		indeterminate	
-24E-90NL5		long bone	b=13, c=1
-24E-90NL5		rib/spine	b=9, c=2
-24E-90NL5		indeterminate	b=3
-24E-90NL5		skull	
-24E-90NL5		indeterminate	
-24E-90NL6		acetabulum	hack=1
-24E-90NL6	M artiodactyl	metapodial	
-24E-90NL6		vert	
-24E-90NL6	M artiodactyl	3rd Phalanx	
-24E-90NL6		phalanx	
-24E-90NL6		petris temporal	
-24E-90NL6		tooth	
-24E-90NL6	sheep/goat	M3	dev=l, partially resorbed alveolus
-24E-90NL6	pig	premolar	
-24E-90NL6		molar	dev=old adult, partially resorbed alveolus
-24E-90NL6	sheep/goat	molar	
-24E-90NL6	bird	long bone	b=2
-24E-90NL6		long bone	b=3
-24E-90NL6		rib/spine	
-24E-90NL6		indeterminate	
-24E-90NL6		long bone	b=7, pc=4, c=3
-24E-90NL6		rib/spine	b=6, pc=1, c=2
-24E-90NL6		skull	b=1
-24E-90NL6		indeterminate	b=3
-24E-90NL6		indeterminate	
-24E-90NL9		zygomatic	
-24E-90NL9	zebu/buffalo	incisor	
-24E-90NL9	goat	2nd phalanx	b=1, Bp 11.14
-24E-90NL9	M artiodactyl	metapodial	b=2
-24E-90NL9	M artiodactyl	phalanx	b=1
-24E-90NL9		antler	
-24E-90NL9		vert	
-24E-90NL9		tooth	b=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMP	grams
-24E-90NL9	Mammalia	Artiodactyla				L ruminant			molar		1	1/4	2
-24E-90NL9	Aves					bird		indeterminate	long bone		9	fragme	8
-24E-90NL9	lm							indeterminate	skull		1	fragme	2
-24E-90NL9	lm							indeterminate	long bone		75	fragme	269
-24E-90NL9	lm							indeterminate	rib/spine		10	fragme	17
-24E-90NL9	lm							indeterminate	indeterminate		18	fragme	40
-24E-90NL9	mm							indeterminate	long bone		193	fragme	109
-24E-90NL9	mm							indeterminate	rib/spine		46	fragme	19
-24E-90NL9	mm							indeterminate	skull		15	fragme	8
-24E-90NL9	mm							indeterminate	indeterminate		153	fragme	75
-24E-90NL9	Aves					bird		indeterminate	indeterminate		5	fragme	2
-24E-90NL9	sm						Distal	fused	phalanx		1	1/2	0
-24E-90NL9	Mammalia	Rodentia				rat/mouse		fused	maxilla		1	<1/4	0
-24E-90NL9	unident							indeterminate	indeterminate			fragme	113
-24E-92NF16L1	Mammalia	Artiodactyla				L/m ruminant			molar		1	1/2	6
-24E-92NF16L1	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	3
-24E-92NF16L1	lm							fused	carpal/tarsal		2	1/4	16
-24E-92NF16L1	mm						Distal	fused	phalanx		1	1/2	1
-24E-92NF16L1	mm							fused	carpal/tarsal		1	1/2	1
-24E-92NF16L1	mm							fused	carpal/tarsal		1	comple	0
-24E-92NF16L1	mm						Proxim	fused	phalanx		1	1/4	0
-24E-92NF16L1	lm							fused	astragalus		1	<1/4	0
-24E-92NF16L1	mm						Distal	fused	phalanx		1	<1/4	0
-24E-92NF16L1	Mammalia						Distal e	unfused	metapodial		1	1/2	0
-24E-92NF16L1	Mammalia	Carnivora	Herpestidae	Herpestes	edwardsii	mongoose	Proxim	fused	tibia		1	1/2	0
-24E-92NF16L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	mandible	left	1	fragme	13
-24E-92NF16L1	mm						Proxim	fused	femur		1	1/4	1
-24E-92NF16L1	Mammalia								tooth		1	fragme	0
-24E-92NF16L1	sm							fused	costal cartilage		2	fragme	0
-24E-92NF16L1	mm							unfused	vert, caudal		1	fragme	1
-24E-92NF16L1	lm							indeterminate	vert		1	fragme	2
-24E-92NF16L1	Reptilia	Testudines				turtle		fused	carapace		3	fragme	1
-24E-92NF16L1	Aves					bird		indeterminate	long bone		5	fragme	2
-24E-92NF16L1	lm							indeterminate	skull		2	fragme	3
-24E-92NF16L1	Osteichthyes					fish		indeterminate	spine		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-90NL9	L ruminant	molar	
-24E-90NL9	bird	long bone	b=1
-24E-90NL9		skull	
-24E-90NL9		long bone	b=18, pc=5, c=1
-24E-90NL9		rib/spine	
-24E-90NL9		indeterminate	b=3, c=1
-24E-90NL9		long bone	b=62, c=11
-24E-90NL9		rib/spine	b=16, c=2
-24E-90NL9		skull	b=3
-24E-90NL9		indeterminate	b=37, pc=9
-24E-90NL9	bird	indeterminate	
-24E-90NL9		phalanx	
-24E-90NL9	rat/mouse	maxilla	
-24E-90NL9		indeterminate	
-24E-92NF16L1	L/m ruminant	molar	
-24E-92NF16L1	L artiodactyl	metapodial	b=1
-24E-92NF16L1		carpal/tarsal	
-24E-92NF16L1		phalanx	
-24E-92NF16L1		carpal/tarsal	
-24E-92NF16L1		carpal/tarsal	
-24E-92NF16L1		phalanx	
-24E-92NF16L1		astragalus	
-24E-92NF16L1		phalanx	
-24E-92NF16L1		metapodial	b=1
-24E-92NF16L1	mongoose	tibia	b=1, Bp 12.62
-24E-92NF16L1	zebu/buffalo	mandible	articular process
-24E-92NF16L1		femur	
-24E-92NF16L1		tooth	
-24E-92NF16L1		costal cartilage	
-24E-92NF16L1		vert, caudal	cranial unfused
-24E-92NF16L1		vert	b=1
-24E-92NF16L1	turtle	carapace	
-24E-92NF16L1	bird	long bone	
-24E-92NF16L1		skull	
-24E-92NF16L1	fish	spine	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-24E-92NF16L1	lm							indeterminate	long bone		28	fragme	97
-24E-92NF16L1	lm							indeterminate	rib/spine		13	fragme	21
-24E-92NF16L1	lm							indeterminate	indeterminate		15	fragme	29
-24E-92NF16L1	mm							indeterminate	long bone		48	fragme	20
-24E-92NF16L1	mm							indeterminate	rib/spine		25	fragme	10
-24E-92NF16L1	mm							indeterminate	skull		8	fragme	5
-24E-92NF16L1	mm							indeterminate	indeterminate		32	fragme	20
-24E-92NF16L1	unident							indeterminate	indeterminate			fragme	18
-24E-92NF1L1	Mammalia								tooth		3	fragme	1
-24E-92NF1L1	lm							indeterminate	long bone		11	fragme	17
-24E-92NF1L1	lm							indeterminate	rib/spine		3	fragme	4
-24E-92NF1L1	mm							indeterminate	long bone		4	fragme	0
-24E-92NF1L1	mm							indeterminate	rib/spine		17	fragme	4
-24E-92NF1L1	lm/mm							indeterminate	skull		1	fragme	2
-24E-92NF1L1	lm/mm							indeterminate	indeterminate		12	fragme	3
-24E-92NF1L1	sm							indeterminate	indeterminate		5	fragme	0
-24E-92NF1L1	unident							indeterminate	indeterminate			fragme	3
-24E-92NF1L1	lm							indeterminate	long bone		1	fragme	1
-24E-92NF1L1flot	unident							indeterminate	indeterminate			fragme	9
-24E-92NF1L1flot	lm						Proxim	indeterminate	femur		1	1/2	62
-24E-92NF1L1flot	Mammalia	Artiodactyla				L ruminant			molar		1	3/4	23
-24E-92NF1L1flot	Mammalia								tooth		5	fragme	5
-24E-92NF1L1flot	Mammalia								antler		2	fragme	6
-24E-92NF1L1flot	lm							indeterminate	skull		3	fragme	3
-24E-92NF1L1flot	lm							indeterminate	long bone		13	fragme	26
-24E-92NF1L1flot	lm							indeterminate	rib/spine		5	fragme	2
-24E-92NF1L1flot	lm							indeterminate	indeterminate		15	fragme	8
-24E-92NF1L1flot	mm							indeterminate	long bone		21	fragme	5
-24E-92NF1L1flot	mm							indeterminate	rib/spine		4	fragme	1
-24E-92NF1L1flot	mm							indeterminate	indeterminate		9	fragme	2
-24E-92NF2L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	metacarpal	left	1	1/2	49
-24E-92NF2L1	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	fused	metapodial		1	1/4	4
-24E-92NF2L1	lm							indeterminate	long bone		16	fragme	21
-24E-92NF2L1	lm							indeterminate	indeterminate		9	fragme	11
-24E-92NF2L1	lm/mm							indeterminate	skull		2	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-92NF16L1		long bone	b=8, pc=2
-24E-92NF16L1		rib/spine	b=6
-24E-92NF16L1		indeterminate	b=3
-24E-92NF16L1		long bone	b=21, c=3
-24E-92NF16L1		rib/spine	b=5, c=5
-24E-92NF16L1		skull	c=3
-24E-92NF16L1		indeterminate	b=8
-24E-92NF16L1		indeterminate	
-24E-92NF1L1		tooth	
-24E-92NF1L1		long bone	c=5
-24E-92NF1L1		rib/spine	
-24E-92NF1L1		long bone	
-24E-92NF1L1		rib/spine	c=4
-24E-92NF1L1		skull	
-24E-92NF1L1		indeterminate	c=1
-24E-92NF1L1		indeterminate	c=3
-24E-92NF1L1		indeterminate	
-24E-92NF1L1		long bone	pc=1
-24E-92NF1L1flot		indeterminate	
-24E-92NF1L1flot		femur	cut=1, hack=1
-24E-92NF1L1flot	L ruminant	molar	
-24E-92NF1L1flot		tooth	
-24E-92NF1L1flot		antler	
-24E-92NF1L1flot		skull	
-24E-92NF1L1flot		long bone	b=1
-24E-92NF1L1flot		rib/spine	
-24E-92NF1L1flot		indeterminate	
-24E-92NF1L1flot		long bone	
-24E-92NF1L1flot		rib/spine	b=2
-24E-92NF1L1flot		indeterminate	
-24E-92NF2L1	zebu/buffalo	metacarpal	
-24E-92NF2L1	sheep/goat	metapodial	
-24E-92NF2L1		long bone	b=2
-24E-92NF2L1		indeterminate	
-24E-92NF2L1		skull	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-24E-92NF2L1	mm							indeterminate	long bone		21	fragme	6
-24E-92NF2L1	mm							indeterminate	rib/spine		12	fragme	4
-24E-92NF2L1	unident							indeterminate	indeterminate			fragme	3
-24E-92NF2L2	lm							indeterminate	vert, cervical		1	1/4	16
-24E-92NF2L2	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			M3		1	3/4	1
-24E-92NF2L2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar	upper	1	3/4	11
-24E-92NF2L2	mm							fused	costal cartilage		2	fragme	0
-24E-92NF2L2	Mammalia								tooth		7	fragme	1
-24E-92NF2L2	Aves					L bird		indeterminate	long bone		10	fragme	5
-24E-92NF2L2	lm							indeterminate	long bone		24	fragme	66
-24E-92NF2L2	lm							indeterminate	rib/spine		6	fragme	9
-24E-92NF2L2	lm							indeterminate	indeterminate		4	fragme	10
-24E-92NF2L2	lm							indeterminate	skull		4	fragme	7
-24E-92NF2L2	mm							indeterminate	long bone		78	fragme	29
-24E-92NF2L2	mm							indeterminate	rib/spine		34	fragme	9
-24E-92NF2L2	mm							indeterminate	indeterminate		31	fragme	16
-24E-92NF2L2	unident							indeterminate	indeterminate			fragme	34
-24E-92NL2	mm							indeterminate	long bone		4	fragme	2
-24E-92NL2	mm							indeterminate	rib/spine		4	fragme	2
-24E-92NL2	sm/mm							indeterminate	indeterminate		2	fragme	0
-24E-92NL2	mm							indeterminate	indeterminate		2	fragme	1
-24E-92NL2	lm						Proxim	fused	humerus		1	<1/4	10
-24E-92NL2	mm						Distal	fused	metapodial		1	<1/4	3
-24E-92NL2	lm						Distal	fused	1st phalanx		1	<1/4	3
-24E-92NL2	mm						epiphy:	unfused	1st phalanx		1	comple	0
-24E-92NL2	lm							fused	petris temporal		1	fragme	1
-24E-92NL2	mm							fused	costal cartilage		1	fragme	0
-24E-92NL2	Mammalia								tooth		10	fragme	5
-24E-92NL2	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer			molar		1	<1/4	1
-24E-92NL2	lm							indeterminate	vert		1	<1/4	5
-24E-92NL2	lm/mm						epiphy:	unfused	vert		1	fragme	1
-24E-92NL2	lm							indeterminate	long bone		15	fragme	30
-24E-92NL2	lm							indeterminate	rib/spine		2	fragme	2
-24E-92NL2	lm/mm							indeterminate	indeterminate		45	fragme	54
-24E-92NL2	mm							indeterminate	long bone		47	fragme	24

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-92NF2L1		long bone	
-24E-92NF2L1		rib/spine	
-24E-92NF2L1		indeterminate	
-24E-92NF2L2		vert, cervical	
-24E-92NF2L2	sheep/goat	M3	dev=m, resorbed alveolus
-24E-92NF2L2	zebu/buffalo	molar	dev=adult
-24E-92NF2L2		costal cartilage	
-24E-92NF2L2		tooth	b=1
-24E-92NF2L2	L bird	long bone	
-24E-92NF2L2		long bone	b=3, c=1, cut=1, sawed=2
-24E-92NF2L2		rib/spine	
-24E-92NF2L2		indeterminate	
-24E-92NF2L2		skull	
-24E-92NF2L2		long bone	b=7, c=2, cut=3
-24E-92NF2L2		rib/spine	b=6
-24E-92NF2L2		indeterminate	c=1
-24E-92NF2L2		indeterminate	
-24E-92NL2		long bone	inc=1
-24E-92NL2		rib/spine	
-24E-92NL2		indeterminate	
-24E-92NL2		indeterminate	b=1
-24E-92NL2		humerus	sf=1
-24E-92NL2		metapodial	
-24E-92NL2		1st phalanx	
-24E-92NL2		1st phalanx	
-24E-92NL2		petris temporal	
-24E-92NL2		costal cartilage	
-24E-92NL2		tooth	
-24E-92NL2	sheep/goat/de	molar	
-24E-92NL2		vert	
-24E-92NL2		vert	
-24E-92NL2		long bone	b=3, c=1
-24E-92NL2		rib/spine	b=1
-24E-92NL2		indeterminate	b=15, c=1
-24E-92NL2		long bone	b=11, c=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
-24E-92NL2	mm							indeterminate	rib/spine		41	fragme	16
-24E-92NL2	mm							indeterminate	indeterminate		1	fragme	1
-24E-92NL2	mm							indeterminate	skull		7	fragme	3
-24E-92NL2	Aves					bird		indeterminate	long bone		5	fragme	2
-24E-92NL2	unident							indeterminate	indeterminate			fragme	55
-24E-92NL2	mm							indeterminate	long bone		15	fragme	5
-24E-92NL2	mm							indeterminate	rib/spine		2	fragme	0
-24E-92NL3	lm							fused	sesamoid		1	1/2	2
-24E-92NL3	lm							fused	mandible		1	<1/4	6
-24E-92NL3	lm/mm							indeterminate	vert		8	fragme	18
-24E-92NL3	lm/mm							unfused	vert		3	fragme	7
-24E-92NL3	lm							indeterminate	skull		8	fragme	22
-24E-92NL3	lm							indeterminate	long bone		35	fragme	48
-24E-92NL3	lm							indeterminate	rib/spine		23	fragme	22
-24E-92NL3	mm							indeterminate	rib/spine		94	fragme	27
-24E-92NL3	mm							indeterminate	long bone		55	fragme	29
-24E-92NL3	mm							indeterminate	skull		17	fragme	11
-24E-92NL3	sm							indeterminate	maxilla		1	<1/4	2
-24E-92NL3	mm							indeterminate	indeterminate		7	fragme	5
-24E-92NL3	Mammalia								tooth		17	fragme	7
-24E-92NL3	Aves					bird		indeterminate	long bone		4	fragme	2
-24E-92NL3	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			molar	upper	1	1/2	1
-24E-92NL3	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			incisor		1	comple	0
-24E-92NL3	lm/mm							indeterminate	indeterminate		78	fragme	40
-24E-92NL3	unident							indeterminate	indeterminate			fragme	86
-24E-92NL4	mm						Proxim	indeterminate	radius		1	1/4	6
-24E-92NL4	lm/mm							indeterminate	long bone		1	fragme	3
-24E-92NL4	lm							fused	sesamoid		1	comple	2
-24E-92NL4	Mammalia								antler		3	fragme	6
-24E-92NL4	Reptilia	Sauria				lizard		fused	vert		1	fragme	0
-24E-92NL4	mm							indeterminate	long bone		1	fragme	0
-24E-92NL4	Mammalia								tooth		28	fragme	24
-24E-92NL4	lm							indeterminate	skull		1	fragme	3
-24E-92NL4	lm							indeterminate	long bone		13	fragme	32
-24E-92NL4	lm							indeterminate	rib/spine		3	fragme	5

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-92NL2		rib/spine	b=10, c=1
-24E-92NL2		indeterminate	
-24E-92NL2		skull	b=1
-24E-92NL2	bird	long bone	c=1
-24E-92NL2		indeterminate	
-24E-92NL2		long bone	
-24E-92NL2		rib/spine	
-24E-92NL3		sesamoid	
-24E-92NL3		mandible	
-24E-92NL3		vert	
-24E-92NL3		vert	
-24E-92NL3		skull	
-24E-92NL3		long bone	c=2, sf=1
-24E-92NL3		rib/spine	b=1
-24E-92NL3		rib/spine	b=14
-24E-92NL3		long bone	c=3
-24E-92NL3		skull	
-24E-92NL3		maxilla	
-24E-92NL3		indeterminate	
-24E-92NL3		tooth	
-24E-92NL3	bird	long bone	
-24E-92NL3	sheep/goat	molar	
-24E-92NL3	sheep/goat	incisor	
-24E-92NL3		indeterminate	
-24E-92NL3		indeterminate	
-24E-92NL4		radius	
-24E-92NL4		long bone	w=1
-24E-92NL4		sesamoid	b=1
-24E-92NL4		antler	b=1
-24E-92NL4	lizard	vert	
-24E-92NL4		long bone	copper-colored
-24E-92NL4		tooth	
-24E-92NL4		skull	b=1
-24E-92NL4		long bone	b=3, c=2
-24E-92NL4		rib/spine	b=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-24E-92NL4	lm							indeterminate	indeterminate		9	fragme	44
-24E-92NL4	mm							indeterminate	long bone		61	fragme	31
-24E-92NL4	mm							indeterminate	rib/spine		23	fragme	10
-24E-92NL4	mm							indeterminate	skull		9	fragme	11
-24E-92NL4	mm							indeterminate	indeterminate		51	fragme	34
-24E-92NL4	unident							indeterminate	indeterminate			fragme	90
-24E-92NL5	lm							fused	astragalus		2	1/2	33
-24E-92NL5	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	1/4	14
-24E-92NL5	lm							fused	scapula		1	<1/4	14
-24E-92NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar	upper	1	comple	6
-24E-92NL5	mm/sm							fused	scapula		1	<1/4	1
-24E-92NL5	lm						Proxim	unfused	tibia		1	1/4	4
-24E-92NL5	lm						Proxim	unfused	phalanx		1	1/4	0
-24E-92NL5	lm							fused	sesamoid		1	fragme	0
-24E-92NL5	mm							fused	sesamoid		1	fragme	0
-24E-92NL5	Mammalia								tooth		7	fragme	4
-24E-92NL5	lm							fused	costal cartilage		1	fragme	0
-24E-92NL5	mm							fused	costal cartilage		2	fragme	0
-24E-92NL5	mm							fused	petris temporal		1	fragme	0
-24E-92NL5	lm							indeterminate	vert		1	<1/4	10
-24E-92NL5	lm							indeterminate	skull		8	fragme	16
-24E-92NL5	lm							indeterminate	long bone		61	fragme	110
-24E-92NL5	lm							indeterminate	rib/spine		15	fragme	18
-24E-92NL5	lm							indeterminate	indeterminate		16	fragme	59
-24E-92NL5	Osteichthyes					fish		fused	vert		2	comple	0
-24E-92NL5	Aves					bird		indeterminate	long bone		7	fragme	2
-24E-92NL5	mm							indeterminate	long bone		114	fragme	48
-24E-92NL5	mm							indeterminate	rib/spine		77	fragme	27
-24E-92NL5	mm							indeterminate	skull		28	fragme	15
-24E-92NL5	mm							indeterminate	indeterminate		97	fragme	55
-24E-92NL5	sm							indeterminate	vert		1	fragme	0
-24E-92NL5	unident							indeterminate	indeterminate			fragme	82
-24E-92NL6	Reptilia	Squamata				snake		fused	mandible		1	fragme	0
-24E-92NL7	lm/mm						Distal	unfused	long bone		1	1/4	0
-24E-92NL7	mm/sm							indeterminate	costal cartilage		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-92NL4		indeterminate	b=2, c=2
-24E-92NL4		long bone	b=16, c=5
-24E-92NL4		rib/spine	b=11, c=2
-24E-92NL4		skull	
-24E-92NL4		indeterminate	b=6, c=4
-24E-92NL4		indeterminate	
-24E-92NL5		astragalus	c=1, cut=1
-24E-92NL5	L artiodactyl	metapodial	b=1
-24E-92NL5		scapula	b=1
-24E-92NL5	zebu/buffalo	premolar	
-24E-92NL5		scapula	
-24E-92NL5		tibia	dev=fetal/newborn
-24E-92NL5		phalanx	dev=fetal/newborn
-24E-92NL5		sesamoid	
-24E-92NL5		sesamoid	
-24E-92NL5		tooth	
-24E-92NL5		costal cartilage	
-24E-92NL5		costal cartilag	b=1
-24E-92NL5		petris temporal	
-24E-92NL5		vert	cut=1
-24E-92NL5		skull	c=1
-24E-92NL5		long bone	b=21, c=4
-24E-92NL5		rib/spine	b=2, pc=1, c=3
-24E-92NL5		indeterminate	b=7, cut=1
-24E-92NL5	fish	vert	diam = 5.12
-24E-92NL5	bird	long bone	
-24E-92NL5		long bone	b=24, pc=1, c=13
-24E-92NL5		rib/spine	b=18, pc=3, c=6, cut=1
-24E-92NL5		skull	b=4
-24E-92NL5		indeterminate	b=24, c=3
-24E-92NL5		vert	
-24E-92NL5		indeterminate	
-24E-92NL6	snake	mandible	b=1
-24E-92NL7		long bone	dev=fetal/newborn
-24E-92NL7		costal cartilage	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-24E-92NL7	mm						shaft	fused	metapodial		1	<1/4	1
-24E-92NL7	lm/mm						epiphy	unfused	vert		1	1/4	0
-24E-92NL7	lm							indeterminate	skull		3	fragme	6
-24E-92NL7	lm							indeterminate	long bone		23	fragme	24
-24E-92NL7	lm							indeterminate	rib/spine		6	fragme	13
-24E-92NL7	lm							indeterminate	indeterminate		13	fragme	26
-24E-92NL7	Mammalia							indeterminate	tooth		27	fragme	6
-24E-92NL7	Mammalia							indeterminate	tooth		2	fragme	1
-24E-92NL7	mm							indeterminate	long bone		108	fragme	42
-24E-92NL7	mm							indeterminate	rib/spine		107	fragme	22
-24E-92NL7	mm							indeterminate	indeterminate		110	fragme	34
-24E-92NL7	sm/bird					sm/bird		indeterminate	indeterminate		5	fragme	0
-24E-92NL7	Aves					bird		indeterminate	long bone		3	fragme	0
-24E-92NL7	unident							indeterminate	indeterminate			fragme	61
-24E-96NL6	Reptilia	Testudines				turtle		fused	vert		1	1/2	0
-24E-96NL6	Reptilia	Sauria				lizard		fused	vert		1	comple	0
-24E-96NL6	Mammalia	Artiodactyla				L ruminant			molar		1	1/4	4
-24E-96NL6	Mammalia								tooth		4	fragme	2
-24E-96NL6	lm							indeterminate	skull		4	fragme	2
-24E-96NL6	lm							indeterminate	long bone		18	fragme	27
-24E-96NL6	lm							indeterminate	rib/spine		6	fragme	5
-24E-96NL6	lm							indeterminate	indeterminate		14	fragme	12
-24E-96NL6	mm							indeterminate	long bone		85	fragme	29
-24E-96NL6	mm							indeterminate	rib/spine		8	fragme	2
-24E-96NL6	mm							indeterminate	indeterminate		13	fragme	5
-24E-96NL6	unident							indeterminate	indeterminate			fragme	34
-22E-88NL2	lm							indeterminate	long bone		3	fragme	5
-22E-88NL2	mm							indeterminate	long bone		9	fragme	2
-22E-88NL2	mm							indeterminate	rib/spine		4	fragme	2
-22E-88NL2	mm							indeterminate	indeterminate		4	fragme	1
-22E-88NL2	unident							indeterminate	indeterminate			fragme	0
-22E-90NF14L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	metacarpal	left	1	1/4	53
-22E-90NF14L1	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo		fused	astragalus	right	1	3/4	74
-22E-90NF14L1	lm							fused	carpal/tarsal		1	1/2	4
-22E-90NF14L1	Mammalia								tooth		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-24E-92NL7		metapodial	sf=1
-24E-92NL7		vert	
-24E-92NL7		skull	
-24E-92NL7		long bone	b=3
-24E-92NL7		rib/spine	b=3
-24E-92NL7		indeterminate	b=2, pc=3
-24E-92NL7		tooth	
-24E-92NL7		tooth	dev=old adult, alveolus resorbed
-24E-92NL7		long bone	b=27, c=3
-24E-92NL7		rib/spine	b=22, c=3
-24E-92NL7		indeterminate	b=25, c=1
-24E-92NL7	sm/bird	indeterminate	b=2
-24E-92NL7	bird	long bone	
-24E-92NL7		indeterminate	
-24E-96NL6	turtle	vert	
-24E-96NL6	lizard	vert	
-24E-96NL6	L ruminant	molar	dev=old adult, very worn
-24E-96NL6		tooth	b=1
-24E-96NL6		skull	
-24E-96NL6		long bone	b=4
-24E-96NL6		rib/spine	c=1
-24E-96NL6		indeterminate	b=8
-24E-96NL6		long bone	b=22, c=5
-24E-96NL6		rib/spine	b=4
-24E-96NL6		indeterminate	b=1, c=1
-24E-96NL6		indeterminate	
-22E-88NL2		long bone	
-22E-88NL2		long bone	
-22E-88NL2		rib/spine	pc=1, cut=1
-22E-88NL2		indeterminate	pc=1
-22E-88NL2		indeterminate	
-22E-90NF14L1	zebu/buffalo	metacarpal	
-22E-90NF14L1	buffalo	astragalus	cut=1, GL1 78.79 GLm 70.91 D1 44.13
-22E-90NF14L1		carpal/tarsal	
-22E-90NF14L1		tooth	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
-22E-90NF14L1	lm							indeterminate	skull		2	fragme	1
-22E-90NF14L1	lm							indeterminate	long bone		8	fragme	8
-22E-90NF14L1	lm							indeterminate	rib/spine		9	fragme	9
-22E-90NF14L1	lm							indeterminate	indeterminate		5	fragme	5
-22E-90NF14L1	mm							indeterminate	long bone		40	fragme	10
-22E-90NF14L1	mm							indeterminate	rib/spine		14	fragme	3
-22E-90NF14L1	mm							indeterminate	skull		1	fragme	0
-22E-90NF14L1	mm							indeterminate	indeterminate		21	fragme	8
-22E-90NF14L1	unident							indeterminate	indeterminate			fragme	29
-22E-90NF7L1	lm							indeterminate	long bone		2	fragme	2
-22E-90NF7L1	lm							indeterminate	rib/spine		2	fragme	1
-22E-90NF7L1	mm							indeterminate	long bone		10	fragme	1
-22E-90NF7L1	mm							indeterminate	rib/spine		3	fragme	0
-22E-90NF7L1	Mammalia								tooth		1	fragme	0
-22E-90NF7L1	Aves/Reptilia					bird/reptile		indeterminate	skull		1	fragme	0
-22E-90NF7L1	mm							indeterminate	indeterminate		5	fragme	0
-22E-90NF7L2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory carpal		1	comple	2
-22E-90NF7L2	lm							fused	sesamoid		1	comple	3
-22E-90NF7L2	Mammalia								tooth		4	fragme	1
-22E-90NF7L2	lm							indeterminate	long bone		17	fragme	15
-22E-90NF7L2	lm							indeterminate	rib/spine		1	fragme	0
-22E-90NF7L2	lm							indeterminate	indeterminate		4	fragme	6
-22E-90NF7L2	mm							indeterminate	long bone		47	fragme	12
-22E-90NF7L2	mm							indeterminate	rib/spine		2	fragme	0
-22E-90NF7L2	mm							indeterminate	indeterminate		10	fragme	3
-22E-90NF7L2	unident							indeterminate	indeterminate			fragme	11
-22E-90NL2	lm						Distal	indeterminate	phalanx		1	<1/4	1
-22E-90NL2	Mammalia								tooth		1	fragme	0
-22E-90NL2	lm							indeterminate	long bone		9	fragme	8
-22E-90NL2	lm							indeterminate	indeterminate		4	fragme	4
-22E-90NL2	mm							indeterminate	long bone		34	fragme	8
-22E-90NL2	mm							indeterminate	indeterminate		6	fragme	2
-22E-90NL2	unident							indeterminate	indeterminate			fragme	4
-22E-90NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	astragalus		1	1/2	20
-22E-90NL3	lm						Proxim	indeterminate	phalanx		2	1/4	12

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-22E-90NF14L1		skull	
-22E-90NF14L1		long bone	
-22E-90NF14L1		rib/spine	
-22E-90NF14L1		indeterminate	cut=1
-22E-90NF14L1		long bone	
-22E-90NF14L1		rib/spine	
-22E-90NF14L1		skull	
-22E-90NF14L1		indeterminate	b=2
-22E-90NF14L1		indeterminate	
-22E-90NF7L1		long bone	
-22E-90NF7L1		rib/spine	pc=1
-22E-90NF7L1		long bone	
-22E-90NF7L1		rib/spine	b=1
-22E-90NF7L1		tooth	
-22E-90NF7L1	bird/reptile	skull	
-22E-90NF7L1		indeterminate	b=1, c=1
-22E-90NF7L2	zebu/buffalo	accessory carpal	
-22E-90NF7L2		sesamoid	cut=1
-22E-90NF7L2		tooth	
-22E-90NF7L2		long bone	b=4
-22E-90NF7L2		rib/spine	
-22E-90NF7L2		indeterminate	c=1
-22E-90NF7L2		long bone	b=6
-22E-90NF7L2		rib/spine	
-22E-90NF7L2		indeterminate	c=2
-22E-90NF7L2		indeterminate	
-22E-90NL2		phalanx	
-22E-90NL2		tooth	
-22E-90NL2		long bone	b=1
-22E-90NL2		indeterminate	pc=1
-22E-90NL2		long bone	b=4, c=1
-22E-90NL2		indeterminate	b=2
-22E-90NL2		indeterminate	
-22E-90NL3	zebu/buffalo	astragalus	
-22E-90NL3		phalanx	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-22E-90NL3	lm						Distal	indeterminate	phalanx		1	1/4	3
-22E-90NL3	Reptilia	Sauria				lizard		fused	vert		1	comple	0
-22E-90NL3	osteichthyes					fish		fused	vert		1	comple	0
-22E-90NL3	Aves					bird		indeterminate	long bone		1	fragme	1
-22E-90NL3	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	plastron		1	fragme	0
-22E-90NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	radial carpal	left	1	1/4	8
-22E-90NL3	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	1
-22E-90NL3	Mammalia	Artiodactyla				M artiodactyl	Distal	fused	metapodial		1	<1/4	0
-22E-90NL3	mm							indeterminate	sesamoid		1	fragme	0
-22E-90NL3	Mammalia	Artiodactyla				L ruminant		fused	molar		1	1/2	5
-22E-90NL3	Mammalia								tooth		15	fragme	7
-22E-90NL3	lm							indeterminate	vert		1	1/4	5
-22E-90NL3	mm							indeterminate	vert		2	fragme	2
-22E-90NL3	lm							indeterminate	long bone		51	fragme	85
-22E-90NL3	lm							indeterminate	rib/spine		16	fragme	14
-22E-90NL3	lm							indeterminate	indeterminate		15	fragme	20
-22E-90NL3	mm							indeterminate	long bone		168	fragme	59
-22E-90NL3	mm							indeterminate	rib/spine		52	fragme	14
-22E-90NL3	mm							indeterminate	indeterminate		36	fragme	22
-22E-90NL3	unident							indeterminate	indeterminate			fragme	108
-22E-90NL4	unident							indeterminate	indeterminate			fragme	70
-22E-90NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	intermediate carpal		1	1/2	12
-22E-90NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	carpal 2/3		1	1/2	13
-22E-90NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	carpal 4		1	comple	6
-22E-90NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory carpal		1	comple	3
-22E-90NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	ulnar carpal		1	comple	9
-22E-90NL4	lm							fused	sesamoid		2	comple	3
-22E-90NL4	mm							fused	carpal/tarsal		1	fragme	1
-22E-90NL4	Mammalia	Artiodactyla	Bovidae			bovid		fused	2nd phalanx		1	1/2	5
-22E-90NL4	Mammalia	Artiodactyla	Bovidae			bovid	Proxim	fused	2nd phalanx		1	1/4	3
-22E-90NL4	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	phalanx		2	1/4	4
-22E-90NL4	lm						Distal	indeterminate	long bone		1	<1/4	18
-22E-90NL4	Mammalia								tooth		19	fragme	23
-22E-90NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			incisor		1	comple	0
-22E-90NL4	Mammalia								antler		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-22E-90NL3		phalanx	
-22E-90NL3	lizard	vert	
-22E-90NL3	fish	vert	diam = 5.87
-22E-90NL3	bird	long bone	
-22E-90NL3	softshell turtle	plastron	c=1
-22E-90NL3	zebu/buffalo	radial carpal	
-22E-90NL3	L artiodactyl	metapodial	
-22E-90NL3	M artiodactyl	metapodial	b=1
-22E-90NL3		sesamoid	
-22E-90NL3	L ruminant	molar	dev=old adult, resorbed alveolus
-22E-90NL3		tooth	
-22E-90NL3		vert	
-22E-90NL3		vert	
-22E-90NL3		long bone	b=4, pc=2, c=1
-22E-90NL3		rib/spine	b=1
-22E-90NL3		indeterminate	b=2
-22E-90NL3		long bone	b=20, pc=13, c=9
-22E-90NL3		rib/spine	b=6, pc=10
-22E-90NL3		indeterminate	pc=4
-22E-90NL3		indeterminate	
-22E-90NL4		indeterminate	
-22E-90NL4	zebu/buffalo	intermediate carpal	
-22E-90NL4	zebu/buffalo	carpal 2/3	
-22E-90NL4	zebu/buffalo	carpal 4	
-22E-90NL4	zebu/buffalo	accessory carpal	
-22E-90NL4	zebu/buffalo	ulnar carpal	
-22E-90NL4		sesamoid	b=1
-22E-90NL4		carpal/tarsal	b=1
-22E-90NL4	bovid	2nd phalanx	
-22E-90NL4	bovid	2nd phalanx	
-22E-90NL4	L artiodactyl	phalanx	
-22E-90NL4		long bone	
-22E-90NL4		tooth	b=1
-22E-90NL4	sheep/goat	incisor	
-22E-90NL4		antler	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-22E-90NL4	lm							indeterminate	skull		3	fragme	6
-22E-90NL4	lm							indeterminate	long bone		38	fragme	85
-22E-90NL4	lm							indeterminate	rib/spine		5	fragme	6
-22E-90NL4	lm							indeterminate	indeterminate		15	fragme	39
-22E-90NL4	sm							indeterminate	rib		1	fragme	0
-22E-90NL4	mm							indeterminate	long bone		209	fragme	84
-22E-90NL4	mm							indeterminate	rib/spine		71	fragme	22
-22E-90NL4	mm							indeterminate	skull		7	fragme	9
-22E-90NL4	mm							indeterminate	indeterminate		69	fragme	27
-22E-90NL4	sm							indeterminate	long bone		3	fragme	0
-22E-90NL4	Aves					bird		indeterminate	skull		1	fragme	1
-22E-90NL4	Osteichthyes					fish		indeterminate	vert		1	fragme	0
-22E-90NL5	lm						Distal	indeterminate	phalanx		2	1/2	6
-22E-90NL5	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		1	1/4	11
-22E-90NL5	lm						Proxim	unfused	femur		1	1/4	11
-22E-90NL5	mm							fused	costal cartilage		1	fragme	0
-22E-90NL5	mm							indeterminate	Lateral Malleolus		1	fragme	1
-22E-90NL5	mm							indeterminate	accessory carpal		1	fragme	0
-22E-90NL5	Mammalia								tooth		5	fragme	2
-22E-90NL5	mm/sm							indeterminate	vert		1	1/4	0
-22E-90NL5	lm							indeterminate	long bone		30	fragme	60
-22E-90NL5	lm							indeterminate	rib/spine		8	fragme	9
-22E-90NL5	lm							indeterminate	indeterminate		16	fragme	34
-22E-90NL5	mm							indeterminate	long bone		77	fragme	28
-22E-90NL5	mm							indeterminate	rib/spine		31	fragme	8
-22E-90NL5	mm							indeterminate	indeterminate		44	fragme	23
-22E-90NL6	lm						Distal	indeterminate	phalanx		1	1/4	4
-22E-90NL6	lm/mm						Proxim	unfused	long bone		1	fragme	3
-22E-90NL6	mm						Proxim	unfused	phalanx		1	fragme	0
-22E-90NL6	Mammalia								tooth		11	fragme	5
-22E-90NL6	sm							indeterminate	rib		2	fragme	0
-22E-90NL6	Reptilia	Sauria				lizard		fused	mandible	right	1	fragme	0
-22E-90NL6	Osteichthyes					fish		fused	vert		1	comple	0
-22E-90NL6	Aves					bird		indeterminate	indeterminate		2	fragme	0
-22E-90NL6	lm							indeterminate	skull		1	fragme	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-22E-90NL4		skull	
-22E-90NL4		long bone	pc=2
-22E-90NL4		rib/spine	
-22E-90NL4		indeterminate	b=5
-22E-90NL4		rib	
-22E-90NL4		long bone	b=33, c=8
-22E-90NL4		rib/spine	b=7, c=4
-22E-90NL4		skull	b=1
-22E-90NL4		indeterminate	b=10
-22E-90NL4		long bone	
-22E-90NL4	bird	skull	
-22E-90NL4	fish	vert	b=1, diam = 7.8
-22E-90NL5		phalanx	
-22E-90NL5	L artiodactyl	metapodial	
-22E-90NL5		femur	pc=1
-22E-90NL5		costal cartilage	
-22E-90NL5		Lateral Malleolus	
-22E-90NL5		accessory ca	c=1
-22E-90NL5		tooth	b=1
-22E-90NL5		vert	
-22E-90NL5		long bone	b=3, pc=5
-22E-90NL5		rib/spine	b=2
-22E-90NL5		indeterminate	b=1
-22E-90NL5		long bone	b=22, c=3
-22E-90NL5		rib/spine	b=9, c=14
-22E-90NL5		indeterminate	b=6
-22E-90NL6		phalanx	
-22E-90NL6		long bone	
-22E-90NL6		phalanx	
-22E-90NL6		tooth	
-22E-90NL6		rib	
-22E-90NL6	lizard	mandible	
-22E-90NL6	fish	vert	diam = 11.56
-22E-90NL6	bird	indeterminate	
-22E-90NL6		skull	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-22E-90NL6	lm							indeterminate	indeterminate		12	fragme	27
-22E-90NL6	lm							indeterminate	long bone		21	fragme	77
-22E-90NL6	lm							indeterminate	rib/spine		10	fragme	22
-22E-90NL6	mm							indeterminate	long bone		101	fragme	41
-22E-90NL6	mm							indeterminate	rib/spine		112	fragme	46
-22E-90NL6	mm							indeterminate	skull		7	fragme	9
-22E-90NL6	mm							indeterminate	indeterminate		40	fragme	25
-22E-90NL6	unident							indeterminate	indeterminate			fragme	72
-22E-92NF15L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	radial carpal	right	1	3/4	5
-22E-92NF15L1	lm							fused	sesamoid		2	comple	5
-22E-92NF15L1	lm							fused	petris temporal		1	fragme	3
-22E-92NF15L1	Mammalia								tooth		9	fragme	7
-22E-92NF15L1	lm							indeterminate	skull		4	fragme	8
-22E-92NF15L1	lm							indeterminate	long bone		14	fragme	36
-22E-92NF15L1	lm							indeterminate	rib/spine		5	fragme	6
-22E-92NF15L1	lm							indeterminate	indeterminate		7	fragme	30
-22E-92NF15L1	mm							indeterminate	long bone		76	fragme	28
-22E-92NF15L1	mm							indeterminate	rib/spine		26	fragme	8
-22E-92NF15L1	mm							indeterminate	indeterminate		23	fragme	13
-22E-92NF15L1	unident							indeterminate	indeterminate			fragme	33
-22E-92NF15L2	Mammalia	Artiodactyla				M artiodactyl		fused	carpal/tarsal		1	comple	1
-22E-92NF15L2	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		1	fragme	10
-22E-92NF15L2	Mammalia	Artiodactyla				M artiodactyl	shaft	fused	metapodial		2	fragme	1
-22E-92NF15L2	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	3
-22E-92NF15L2	Reptilia	Testudines				turtle		fused	vert		1	fragme	0
-22E-92NF15L2	mm							indeterminate	vert		2	fragme	2
-22E-92NF15L2	Mammalia								tooth		10	fragme	5
-22E-92NF15L2	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		unerupted	molar		1	comple	0
-22E-92NF15L2	reptilia/amphibia					reptile/amphibian		fused	vert		1	1/2	0
-22E-92NF15L2	sm							fused	vert, cervical		1	comple	0
-22E-92NF15L2	Aves					bird		indeterminate	long bone		4	fragme	3
-22E-92NF15L2	lm/mm							indeterminate	skull		5	fragme	4
-22E-92NF15L2	lm							indeterminate	long bone		23	fragme	73
-22E-92NF15L2	lm							indeterminate	indeterminate		9	fragme	31
-22E-92NF15L2	lm							indeterminate	rib/spine		14	fragme	14

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-22E-90NL6		indeterminate	b=3
-22E-90NL6		long bone	b=6
-22E-90NL6		rib/spine	b=1
-22E-90NL6		long bone	b=10, c=5
-22E-90NL6		rib/spine	b=15, c=5
-22E-90NL6		skull	
-22E-90NL6		indeterminate	b=3, c=3
-22E-90NL6		indeterminate	
-22E-92NF15L1	zebu/buffalo	radial carpal	
-22E-92NF15L1		sesamoid	
-22E-92NF15L1		petris tempor	cut=1
-22E-92NF15L1		tooth	
-22E-92NF15L1		skull	
-22E-92NF15L1		long bone	b=2, c=3
-22E-92NF15L1		rib/spine	b=1
-22E-92NF15L1		indeterminate	b=2
-22E-92NF15L1		long bone	b=20, pc=8, c=6
-22E-92NF15L1		rib/spine	b=6
-22E-92NF15L1		indeterminate	c=3
-22E-92NF15L1		indeterminate	
-22E-92NF15L2	M artiodactyl	carpal/tarsal	
-22E-92NF15L2	L artiodactyl	metapodial	pc=1
-22E-92NF15L2	M artiodactyl	metapodial	
-22E-92NF15L2	L artiodactyl	metapodial	
-22E-92NF15L2	turtle	vert	
-22E-92NF15L2		vert	
-22E-92NF15L2		tooth	
-22E-92NF15L2	sheep/goat/de	molar	
-22E-92NF15L2	reptile/amphibi	vert	
-22E-92NF15L2		vert, cervical	
-22E-92NF15L2	bird	long bone	b=2
-22E-92NF15L2		skull	
-22E-92NF15L2		long bone	b=8, pc=2, c=2
-22E-92NF15L2		indeterminate	b=3, c=1
-22E-92NF15L2		rib/spine	b=3, c=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-22E-92NF15L2	mm							indeterminate	long bone		79	fragme	43
-22E-92NF15L2	mm							indeterminate	rib/spine		41	fragme	16
-22E-92NF15L2	mm							indeterminate	indeterminate		26	fragme	21
-22E-92NF15L2	unident							indeterminate	indeterminate			fragme	92
-22E-92NL2	Mammalia								tooth		4	fragme	1
-22E-92NL2	lm							indeterminate	long bone		2	fragme	2
-22E-92NL2	lm							indeterminate	rib/spine		3	fragme	1
-22E-92NL2	mm							indeterminate	long bone		18	fragme	3
-22E-92NL2	mm							indeterminate	rib/spine		3	fragme	1
-22E-92NL2	mm							indeterminate	indeterminate		12	fragme	3
-22E-92NL3	sm							indeterminate	long bone		1	fragme	0
-22E-92NL3	lm							indeterminate	long bone		5	fragme	4
-22E-92NL3	lm							indeterminate	rib/spine		2	fragme	2
-22E-92NL3	lm							indeterminate	indeterminate		1	fragme	2
-22E-92NL3	mm							indeterminate	long bone		28	fragme	8
-22E-92NL3	mm							indeterminate	rib/spine		6	fragme	1
-22E-92NL3	mm							indeterminate	indeterminate		13	fragme	3
-22E-92NL3	unident							indeterminate	indeterminate			fragme	3
-22E-92NL4	lm						Distal	indeterminate	phalanx		1	1/4	4
-22E-92NL4	Mammalia	Artiodactyla				M artiodactyl	Distal e	unfused	metapodial		1	comple	1
-22E-92NL4	Mammalia								tooth		11	fragme	6
-22E-92NL4	lm							indeterminate	long bone		14	fragme	20
-22E-92NL4	lm							indeterminate	indeterminate		1	fragme	1
-22E-92NL4	mm							indeterminate	long bone		79	fragme	26
-22E-92NL4	mm							indeterminate	rib/spine		20	fragme	4
-22E-92NL4	mm							indeterminate	indeterminate		13	fragme	8
-22E-92NL4	unident							indeterminate	indeterminate			fragme	13
-22E-92NL5	Mammalia								tooth		1	fragme	0
-22E-92NL5	lm							indeterminate	long bone		12	fragme	15
-22E-92NL5	lm							indeterminate	rib/spine		4	fragme	2
-22E-92NL5	lm							indeterminate	indeterminate		14	fragme	16
-22E-92NL5	mm							indeterminate	long bone		32	fragme	8
-22E-92NL5	mm							indeterminate	rib/spine		9	fragme	2
-22E-92NL5	mm							indeterminate	indeterminate		7	fragme	0
-22E-92NL5	unident							indeterminate	indeterminate			fragme	15

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-22E-92NF15L2		long bone	b=10, pc=1, c=1, cut=1
-22E-92NF15L2		rib/spine	b=7, pc=4, c=4
-22E-92NF15L2		indeterminate	b=4, c=1
-22E-92NF15L2		indeterminate	
-22E-92NL2		tooth	b=1
-22E-92NL2		long bone	
-22E-92NL2		rib/spine	b=1
-22E-92NL2		long bone	b=1, c=1
-22E-92NL2		rib/spine	b=1
-22E-92NL2		indeterminate	b=1
-22E-92NL3		long bone	
-22E-92NL3		long bone	
-22E-92NL3		rib/spine	c=1
-22E-92NL3		indeterminate	
-22E-92NL3		long bone	b=1, c=3
-22E-92NL3		rib/spine	b=3, c=1
-22E-92NL3		indeterminate	b=1, c=1
-22E-92NL3		indeterminate	
-22E-92NL4		phalanx	
-22E-92NL4	M artiodactyl	metapodial	
-22E-92NL4		tooth	
-22E-92NL4		long bone	b=4
-22E-92NL4		indeterminate	
-22E-92NL4		long bone	b=8, c=7
-22E-92NL4		rib/spine	b=2, pc=3
-22E-92NL4		indeterminate	b=2, pc=3, c=1
-22E-92NL4		indeterminate	
-22E-92NL5		tooth	
-22E-92NL5		long bone	b=2, pc=2
-22E-92NL5		rib/spine	b=1
-22E-92NL5		indeterminate	pc=5, c=1
-22E-92NL5		long bone	b=8
-22E-92NL5		rib/spine	b=2, c=1
-22E-92NL5		indeterminate	b=1
-22E-92NL5		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-20E-86NL1	lm							indeterminate	indeterminate		1	fragme	2
-20E-86NL1	mm							indeterminate	long bone		3	fragme	0
-20E-88NL1	unident							indeterminate	indeterminate			fragme	0
-20E-88NL2	lm							indeterminate	long bone		2	fragme	1
-20E-88NL2	mm							indeterminate	long bone		2	fragme	0
-20E-90NF8L1	lm							indeterminate	long bone		4	fragme	3
-20E-90NF8L1	mm							indeterminate	long bone		7	fragme	1
-20E-90NF8L2	lm							indeterminate	astragalus		1	1/4	7
-20E-90NF8L2	lm							indeterminate	long bone		5	fragme	5
-20E-90NF8L2	lm							indeterminate	indeterminate		1	fragme	1
-20E-90NF8L2	mm							indeterminate	long bone		43	fragme	9
-20E-90NF8L2	mm							indeterminate	rib/spine		12	fragme	2
-20E-90NF8L2	mm							indeterminate	indeterminate		9	fragme	3
-20E-90NF8L2	unident							indeterminate	indeterminate			fragme	3
-20E-90NL1	unident							indeterminate	indeterminate			fragme	0
-20E-90NL2	lm							indeterminate	long bone		2	fragme	3
-20E-90NL2	lm							indeterminate	indeterminate		3	fragme	3
-20E-90NL2	Mammalia								tooth		2	fragme	0
-20E-90NL2	mm							indeterminate	long bone		7	fragme	0
-20E-90NL2	mm							indeterminate	rib/spine		2	fragme	0
-20E-90NL3	lm							indeterminate	indeterminate		5	fragme	9
-20E-90NL3	lm							indeterminate	long bone		13	fragme	19
-20E-90NL3	mm							indeterminate	long bone		77	fragme	21
-20E-90NL3	mm							indeterminate	rib/spine		10	fragme	2
-20E-90NL3	mm							indeterminate	indeterminate		15	fragme	6
-20E-90NL3	Mammalia								tooth		1	fragme	0
-20E-90NL3	unident							indeterminate	indeterminate			fragme	11
-20E-90NL4	Reptilia					reptile		indeterminate	skull		2	fragme	2
-20E-90NL4	lm							indeterminate	scapula		1	<1/4	9
-20E-90NL4	Mammalia								antler		1	fragme	0
-20E-90NL4	Mammalia								tooth		6	fragme	1
-20E-90NL4	lm							indeterminate	long bone		18	fragme	48
-20E-90NL4	lm							fused	mandible		1	<1/4	5
-20E-90NL4	lm							indeterminate	indeterminate		16	fragme	59
-20E-90NL4	mm							indeterminate	long bone		92	fragme	35

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-20E-86NL1		indeterminate	
-20E-86NL1		long bone	
-20E-88NL1		indeterminate	
-20E-88NL2		long bone	
-20E-88NL2		long bone	
-20E-90NF8L1		long bone	c=1
-20E-90NF8L1		long bone	
-20E-90NF8L2		astragalus	hack=1
-20E-90NF8L2		long bone	b=1
-20E-90NF8L2		indeterminate	
-20E-90NF8L2		long bone	b=6, c=1
-20E-90NF8L2		rib/spine	b=3
-20E-90NF8L2		indeterminate	b=2
-20E-90NF8L2		indeterminate	
-20E-90NL1		indeterminate	
-20E-90NL2		long bone	
-20E-90NL2		indeterminate	b=1
-20E-90NL2		tooth	
-20E-90NL2		long bone	c=1
-20E-90NL2		rib/spine	
-20E-90NL3		indeterminate	
-20E-90NL3		long bone	c=2
-20E-90NL3		long bone	b=9, c=2
-20E-90NL3		rib/spine	b=1
-20E-90NL3		indeterminate	b=3
-20E-90NL3		tooth	
-20E-90NL3		indeterminate	
-20E-90NL4	reptile	skull	pc=2
-20E-90NL4		scapula	
-20E-90NL4		antler	b=1
-20E-90NL4		tooth	
-20E-90NL4		long bone	b=3, c=2
-20E-90NL4		mandible	
-20E-90NL4		indeterminate	b=4, pc=3
-20E-90NL4		long bone	b=14, c=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-20E-90NL4	mm							indeterminate	rib/spine		20	fragme	11
-20E-90NL4	mm							indeterminate	indeterminate		39	fragme	25
-20E-90NL4	mm							indeterminate	skull		7	fragme	5
-20E-90NL4	sm						Proxim	unfused	tibia		1	3/4	0
-20E-90NL4	unident							indeterminate	indeterminate			fragme	49
-20E-90NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	1st phalanx		1	comple	23
-20E-90NL5	Mammalia								tooth		3	fragme	1
-20E-90NL5	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		3	fragme	0
-20E-90NL5	Aves					bird		indeterminate	long bone		2	fragme	0
-20E-90NL5	lm							indeterminate	long bone		8	fragme	16
-20E-90NL5	lm							indeterminate	rib/spine		3	fragme	3
-20E-90NL5	lm							indeterminate	indeterminate		2	fragme	6
-20E-90NL5	mm							indeterminate	long bone		71	fragme	26
-20E-90NL5	mm							indeterminate	rib/spine		33	fragme	7
-20E-90NL5	mm							indeterminate	indeterminate		47	fragme	20
-20E-90NL5	unident							indeterminate	indeterminate			fragme	22
-20E-90NL5PP2	Mammalia	Artiodactyla				M artiodactyl	Proxim	fused	metatarsal		1	1/2	1
-20E-90NL6	Reptilia	Squamata	Colubridae	Elaphe		Trinket snake		fused	vert		1	3/4	0
-20E-90NL6	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	plastron		1	fragme	1
-20E-90NL6	Osteichthyes					fish		fused	vert		1	comple	0
-20E-90NL6	Aves					bird		indeterminate	long bone		2	fragme	1
-20E-90NL6	lm							indeterminate	vert		1	<1/4	10
-20E-90NL6	lm							fused	sesamoid		1	comple	1
-20E-90NL6	mm						epiphy:	unfused	vert		2	fragme	0
-20E-90NL6	mm							fused	costal cartilage		1	fragme	1
-20E-90NL6	mm							fused	mandible	right	1	fragme	4
-20E-90NL6	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			M3	right	1	comple	8
-20E-90NL6	Mammalia								tooth		3	fragme	0
-20E-90NL6	lm							indeterminate	long bone		26	fragme	91
-20E-90NL6	lm							indeterminate	rib/spine		9	fragme	7
-20E-90NL6	lm							indeterminate	indeterminate		13	fragme	23
-20E-90NL6	mm							indeterminate	long bone		111	fragme	44
-20E-90NL6	mm							indeterminate	rib/spine		31	fragme	7
-20E-90NL6	mm							indeterminate	skull		1	fragme	1
-20E-90NL6	mm							indeterminate	indeterminate		27	fragme	11

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-20E-90NL4		rib/spine	b=8
-20E-90NL4		indeterminate	b=8
-20E-90NL4		skull	
-20E-90NL4		tibia	
-20E-90NL4		indeterminate	
-20E-90NL5	zebu/buffalo	1st phalanx	GLPe 70.53 Bp 26.91 Bd 26.80
-20E-90NL5		tooth	
-20E-90NL5	softshell turtle	carapace	
-20E-90NL5	bird	long bone	
-20E-90NL5		long bone	b=2
-20E-90NL5		rib/spine	
-20E-90NL5		indeterminate	c=1
-20E-90NL5		long bone	b=5, c=4
-20E-90NL5		rib/spine	b=4, c=1
-20E-90NL5		indeterminate	b=5, pc=1
-20E-90NL5		indeterminate	
-20E-90NL5PP2	M artiodactyl	metatarsal	w=1, drill=1, cut, ground and drilled through
-20E-90NL6	Trinket snake	vert	
-20E-90NL6	softshell turtle	plastron	
-20E-90NL6	fish	vert	diam = 5.13
-20E-90NL6	bird	long bone	
-20E-90NL6		vert	
-20E-90NL6		sesamoid	
-20E-90NL6		vert	
-20E-90NL6		costal cartilage	
-20E-90NL6		mandible	w/ broken premolar
-20E-90NL6	sheep/goat	M3	dev=g, L 30.04 B 10.64
-20E-90NL6		tooth	b=2
-20E-90NL6		long bone	b=7, pc=4
-20E-90NL6		rib/spine	b=2
-20E-90NL6		indeterminate	b=3
-20E-90NL6		long bone	b=16, c=8
-20E-90NL6		rib/spine	b=11, c=3
-20E-90NL6		skull	
-20E-90NL6		indeterminate	b=3, c=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
-20E-90NL6	unident							indeterminate	indeterminate			fragme	73
-20E-92NL1	mm							indeterminate	long bone		7	fragme	3
-20E-92NL2	lm							indeterminate	long bone		3	fragme	3
-20E-92NL2	mm							indeterminate	long bone		6	fragme	2
-20E-92NL2	mm							indeterminate	rib/spine		4	fragme	0
-20E-92NL2	Mammalia								tooth		1	fragme	0
-20E-92NL2	lm/mm							indeterminate	indeterminate		2	fragme	0
0E125NL0	lm							indeterminate	long bone		2	fragme	1
0E125NL0	lm							indeterminate	vert		1	fragme	2
0E125NL0	mm							indeterminate	long bone		9	fragme	1
0E125NL0	mm							indeterminate	rib/spine		1	fragme	0
0E125NL0	Mammalia								tooth		2	fragme	1
0E125NL0	mm							indeterminate	indeterminate		4	fragme	1
0E125NL1	lm						Distal	indeterminate	radius		1	1/4	28
0E125NL1	Mammalia								antler		2	fragme	2
0E125NL1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	ulnar carpal	left	1	comple	12
0E125NL1	mm							indeterminate	mandible	right	1	fragme	1
0E125NL1	lm							indeterminate	carpal/tarsal		1	1/2	1
0E125NL1	lm							indeterminate	vert		7	fragme	91
0E125NL1	lm							unfused	vert		1	fragme	13
0E125NL1	mm							indeterminate	vert		1	fragme	1
0E125NL1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar		1	fragme	9
0E125NL1	Mammalia	Artiodactyla				M artiodactyl	Distal	fused	metapodial		1	<1/4	0
0E125NL1	Mammalia								tooth		40	fragme	14
0E125NL1	lm							indeterminate	long bone		45	fragme	115
0E125NL1	lm							indeterminate	rib/spine		2	fragme	5
0E125NL1	lm							indeterminate	indeterminate		7	fragme	17
0E125NL1	mm							indeterminate	long bone		124	fragme	49
0E125NL1	mm						Distal	indeterminate	phalanx		1	1/2	0
0E125NL1	mm							indeterminate	rib/spine		24	fragme	8
0E125NL1	mm							indeterminate	indeterminate		31	fragme	23
0E125NL1	unident							indeterminate	indeterminate			fragme	90
0E125NL1	mm							indeterminate	long bone		5	fragme	1
0E125NL2	lm							indeterminate	maxilla		1	fragme	78
0E125NL2	lm							indeterminate	scapula		1	1/4	29

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
-20E-90NL6		indeterminate	
-20E-92NL1		long bone	c=5
-20E-92NL2		long bone	
-20E-92NL2		long bone	b=1, inc=1
-20E-92NL2		rib/spine	c=1
-20E-92NL2		tooth	
-20E-92NL2		indeterminate	c=1
0E125NL0		long bone	c=1
0E125NL0		vert	c=1
0E125NL0		long bone	c=4
0E125NL0		rib/spine	b=1
0E125NL0		tooth	
0E125NL0		indeterminate	b=1, c=1
0E125NL1		radius	10% calcined extra weight
0E125NL1		antler	10% calcined extra weight
0E125NL1	zebu/buffalo	ulnar carpal	10% calcined extra weight
0E125NL1		mandible	10% calcined extra weight
0E125NL1		carpal/tarsal	pc=1, 10% calcined extra weight
0E125NL1		vert	10% calcined extra weight
0E125NL1		vert	10% calcined extra weight
0E125NL1		vert	10% calcined extra weight
0E125NL1	zebu/buffalo	premolar	10% calcined extra weight
0E125NL1	M artiodactyl	metapodial	10% calcined extra weight
0E125NL1		tooth	10% calcined extra weight
0E125NL1		long bone	b=110% calcined extra weight
0E125NL1		rib/spine	10% calcined extra weight
0E125NL1		indeterminate	10% calcined extra weight
0E125NL1		long bone	b=8, c=4, 10% calcined extra weight
0E125NL1		phalanx	10% calcined extra weight
0E125NL1		rib/spine	b=4. c=1. 10% calcined extra weight
0E125NL1		indeterminate	b=6, c=3, 10% calcined extra weight
0E125NL1		indeterminate	10% calcined extra weight
0E125NL1		long bone	c=2
0E125NL2		maxilla	
0E125NL2		scapula	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
0E125NL2	lm						Distal e	unfused	radius		1	comple	8
0E125NL2	mm							indeterminate	scapula		1	<1/4	3
0E125NL2	mm							fused	sesamoid		1	comple	1
0E125NL2	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	humerus	right	1	1/4	142
0E125NL2	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		fused	scapula		1	fragme	0
0E125NL2	sm							fused	phalanx		1	comple	0
0E125NL2	lm							fused	petris temporal		2	fragme	7
0E125NL2	mm							fused	petris temporal		1	fragme	0
0E125NL2	mm							fused	hyoid		1	fragme	0
0E125NL2	sm							fused	femur		2	comple	0
0E125NL2	Mammalia								tooth		5	fragme	3
0E125NL2	Aves					bird		indeterminate	long bone		1	fragme	0
0E125NL2	lm							indeterminate	skull		3	fragme	13
0E125NL2	lm							indeterminate	long bone		29	fragme	77
0E125NL2	lm							indeterminate	rib/spine		9	fragme	49
0E125NL2	lm							indeterminate	indeterminate		31	fragme	77
0E125NL2	mm							indeterminate	long bone		36	fragme	30
0E125NL2	mm							indeterminate	rib/spine		28	fragme	18
0E125NL2	mm							indeterminate	skull		4	fragme	4
0E125NL2	mm							indeterminate	indeterminate		19	fragme	12
0E125NL2	unident							indeterminate	indeterminate			fragme	141
0E125NL2	Mammalia								tooth		1	fragme	1
0E125NL3	lm							indeterminate	skull		1	fragme	2
0E125NL3	Aves					bird		indeterminate	long bone		1	fragme	3
0E125NL3	Reptilia	Testudines				turtle		fused	carapace		1	fragme	0
0E125NL3	lm/mm							fused	petris temporal		1	fragme	2
0E125NL3	Mammalia								tooth		8	fragme	4
0E125NL3	sm/bird					sm/bird		indeterminate	skull		5	fragme	4
0E125NL3	lm							indeterminate	long bone		23	fragme	107
0E125NL3	lm							indeterminate	rib/spine		1	fragme	2
0E125NL3	lm							indeterminate	indeterminate		10	fragme	69
0E125NL3	mm							indeterminate	long bone		38	fragme	25
0E125NL3	mm							indeterminate	rib/spine		3	fragme	1
0E125NL3	mm							indeterminate	indeterminate		11	fragme	6
0E125NL3	unident							indeterminate	indeterminate			fragme	102

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
0E125NL2		radius	
0E125NL2		scapula	c=1
0E125NL2		sesamoid	
0E125NL2	zebu	humerus	
0E125NL2	Indian Hare	scapula	
0E125NL2		phalanx	
0E125NL2		petris temporal	
0E125NL2		petris temporal	
0E125NL2		hyoid	
0E125NL2		femur	
0E125NL2		tooth	
0E125NL2	bird	long bone	
0E125NL2		skull	
0E125NL2		long bone	b=4
0E125NL2		rib/spine	b=2, c=1
0E125NL2		indeterminate	b=4, pc=1
0E125NL2		long bone	
0E125NL2		rib/spine	b=9, c=3
0E125NL2		skull	
0E125NL2		indeterminate	b=6
0E125NL2		indeterminate	
0E125NL2		tooth	
0E125NL3		skull	25% calcined extra weight
0E125NL3	bird	long bone	25% calcined extra weight
0E125NL3	turtle	carapace	25% calcined extra weight
0E125NL3		petris tempor	25% calcined extra weight
0E125NL3		tooth	25% calcined extra weight
0E125NL3	sm/bird	skull	c=1, 25% calcined extra weight
0E125NL3		long bone	25% calcined extra weight
0E125NL3		rib/spine	25% calcined extra weight
0E125NL3		indeterminate	25% calcined extra weight
0E125NL3		long bone	b=2, c=1, 25% calcined extra weight
0E125NL3		rib/spine	b=1, 25% calcined extra weight
0E125NL3		indeterminate	c=1, 25% calcined extra weight
0E125NL3		indeterminate	25% calcined extra weight

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
0E125NL4	lm							indeterminate	long bone		2	fragme	16
0E125NL4	lm							indeterminate	long bone		10	fragme	20
0E125NL4	Mammalia								tooth		2	fragme	0
0E125NL4	lm/mm							indeterminate	vert		2	fragme	3
0E125NL4	lm							indeterminate	indeterminate		3	fragme	5
0E125NL4	mm							indeterminate	long bone		18	fragme	9
0E125NL4	mm							indeterminate	rib/spine		5	fragme	1
0E125NL4	mm							indeterminate	indeterminate		2	fragme	1
0E125NL4	unident							indeterminate	indeterminate			fragme	8
0E125NL5	lm							indeterminate	long bone		3	fragme	8
0E125NL5	mm							indeterminate	long bone		1	fragme	0
0E125NL6	lm							indeterminate	long bone		3	fragme	5
0E125NL6	mm							indeterminate	long bone		4	fragme	2
0E125NL7	lm							indeterminate	long bone		1	fragme	1
0E125NL7	mm							indeterminate	long bone		2	fragme	0
0E125NL8	unident							indeterminate	indeterminate			fragme	0
20E-26NF13L1	Reptilia	Testudines	Emydidae	Kachuga	tentoria	Indian tent tu	Proxim	indeterminate	femur		1	1/2	1
20E-26NF13L1	mm						shaft	fused	metapodial		1	fragme	4
20E-26NF13L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	1st phalanx	right	1	3/4	20
20E-26NF13L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	1st phalanx	left	1	1/2	11
20E-26NF13L1	sm							fused	vert, cervical		2	fragme	1
20E-26NF13L1	Mammalia								antler		1	fragme	6
20E-26NF13L1	lm							fused	calcaneus		1	1/4	13
20E-26NF13L1	lm/mm							fused	mandible		1	<1/4	5
20E-26NF13L1	Reptilia	Sauria	Scincidae			skink sp.		fused	vert		1	3/4	0
20E-26NF13L1	sm							indeterminate	long bone		2	fragme	0
20E-26NF13L1	mm							fused	carpal/tarsal		2	fragme	5
20E-26NF13L1	sm							fused	vert, caudal		1	fragme	0
20E-26NF13L1	mm/sm							indeterminate	vert		1	1/4	2
20E-26NF13L1	Mammalia								tooth		5	fragme	4
20E-26NF13L1	lm							indeterminate	vert		6	fragme	44
20E-26NF13L1	mm							indeterminate	vert		1	fragme	0
20E-26NF13L1	lm							indeterminate	skull		5	fragme	22
20E-26NF13L1	lm							indeterminate	long bone		17	fragme	84
20E-26NF13L1	lm							indeterminate	rib/spine		9	fragme	22

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
0E125NL4		long bone	2 specimens shaped into tabular cross-section
0E125NL4		long bone	25% calcined extra weight
0E125NL4		tooth	25% calcined extra weight
0E125NL4		vert	25% calcined extra weight
0E125NL4		indeterminate	25% calcined extra weight
0E125NL4		long bone	25% calcined extra weight
0E125NL4		rib/spine	b=1, 25% calcined extra weight
0E125NL4		indeterminate	b=1, 25% calcined extra weight
0E125NL4		indeterminate	25% calcined extra weight
0E125NL5		long bone	
0E125NL5		long bone	
0E125NL6		long bone	25% calcined extra weight
0E125NL6		long bone	25% calcined extra weight
0E125NL7		long bone	
0E125NL7		long bone	
0E125NL8		indeterminate	
20E-26NF13L1	Indian tent turt	femur	20% calcined extra weight
20E-26NF13L1		metapodial	pc=1, 20% calcined extra weight
20E-26NF13L1	zebu	1st phalanx	Bp 27.78
20E-26NF13L1	zebu	1st phalanx	20% calcined extra weight
20E-26NF13L1		vert, cervical	20% calcined extra weight
20E-26NF13L1		antler	20% calcined extra weight
20E-26NF13L1		calcaneus	cut=1, 20% calcined extra weight
20E-26NF13L1		mandible	cut=1, 20% calcined extra weight
20E-26NF13L1	skink sp.	vert	20% calcined extra weight
20E-26NF13L1		long bone	20% calcined extra weight
20E-26NF13L1		carpal/tarsal	20% calcined extra weight
20E-26NF13L1		vert, caudal	20% calcined extra weight
20E-26NF13L1		vert	20% calcined extra weight
20E-26NF13L1		tooth	b=1, 20% calcined extra weight
20E-26NF13L1		vert	20% calcined extra weight
20E-26NF13L1		vert	20% calcined extra weight
20E-26NF13L1		skull	20% calcined extra weight
20E-26NF13L1		long bone	b=2, 20% calcined extra weight
20E-26NF13L1		rib/spine	b=2, 20% calcined extra weight

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-26NF13L1	lm							indeterminate	indeterminate		23	fragme	37
20E-26NF13L1	mm							indeterminate	long bone		17	fragme	11
20E-26NF13L1	mm							indeterminate	rib/spine		17	fragme	6
20E-26NF13L1	mm							indeterminate	skull		1	fragme	1
20E-26NF13L1	mm							indeterminate	indeterminate		22	fragme	17
20E-26NF13L1	unident							indeterminate	indeterminate			fragme	60
20E-26NF13L1	lm/mm							indeterminate	long bone		1	fragme	1
20E-26NF13L1	lm							indeterminate	long bone		3	fragme	6
20E-26NF13L1	mm							indeterminate	rib/spine		1	fragme	1
20E-26NF13L1	mm							indeterminate	long bone		5	fragme	2
20E-26NF13L1flot	sm							indeterminate	ulna		1	3/4	2
20E-26NF13L1flot	Osteichthyes					fish		indeterminate	spine		1	fragme	0
20E-26NF13L1flot	lm							indeterminate	rib/spine		1	fragme	0
20E-26NF13L1flot	Mammalia								tooth		2	fragme	0
20E-26NF13L1flot	mm							indeterminate	indeterminate		1	fragme	0
20E-26NF13L1flot	mm							indeterminate	long bone		1	fragme	0
20E-26NF13L1flot	unident							indeterminate	indeterminate			fragme	0
20E-26NF13L1flot	lm							indeterminate	rib/spine		2	fragme	4
20E-26NF13L1flot	lm/mm							indeterminate	skull		2	fragme	1
20E-26NF13L1flot	mm							indeterminate	long bone		3	fragme	1
20E-26NF13L1flot	mm							indeterminate	indeterminate		3	fragme	1
20E-26NF13L1flot	mm/sm							indeterminate	vert, caudal		1	fragme	1
20E-26NF13L1flot	unident							indeterminate	indeterminate			fragme	0
20E-26NF15L1flot	mm/sm							indeterminate	vert, caudal		1	fragme	0
20E-26NF15L1flot	Osteichthyes					fish		fused	vert		1	comple	0
20E-26NF15L1flot	Mammalia								tooth		1	fragme	0
20E-26NF15L1flot	mm							indeterminate	long bone		2	fragme	3
20E-26NF15L1flot	mm							indeterminate	rib/spine		3	fragme	0
20E-26NF15L1flot	mm							indeterminate	indeterminate		3	fragme	0
20E-26NF15L1flot	unident							indeterminate	indeterminate			fragme	1
20E-26NL1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	radial carpal	left	1	1/2	7
20E-26NL1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	accessory carpal		1	1/2	1
20E-26NL1	Mammalia								tooth		14	fragme	7
20E-26NL1	lm/mm							indeterminate	skull		1	fragme	1
20E-26NL1	lm							indeterminate	long bone		44	fragme	53

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-26NF13L1		indeterminate	b=2, pc=1, 20% calcined extra weight
20E-26NF13L1		long bone	b=1, 20% calcined extra weight
20E-26NF13L1		rib/spine	b=3, 20% calcined extra weight
20E-26NF13L1		skull	20% calcined extra weight
20E-26NF13L1		indeterminate	b=1, 20% calcined extra weight
20E-26NF13L1		indeterminate	20% calcined extra weight
20E-26NF13L1		long bone	w=1
20E-26NF13L1		long bone	b=1
20E-26NF13L1		rib/spine	b=1
20E-26NF13L1		long bone	b=2
20E-26NF13L1flot		ulna	
20E-26NF13L1flot	fish	spine	
20E-26NF13L1flot		rib/spine	
20E-26NF13L1flot		tooth	c=2
20E-26NF13L1flot		indeterminate	
20E-26NF13L1flot		long bone	
20E-26NF13L1flot		indeterminate	
20E-26NF13L1flot		rib/spine	b=1, pc=1, cut=1
20E-26NF13L1flot		skull	
20E-26NF13L1flot		long bone	
20E-26NF13L1flot		indeterminate	
20E-26NF13L1flot		vert, caudal	
20E-26NF13L1flot		indeterminate	
20E-26NF15L1flot		vert, caudal	b=1
20E-26NF15L1flot	fish	vert	
20E-26NF15L1flot		tooth	b=1
20E-26NF15L1flot		long bone	
20E-26NF15L1flot		rib/spine	c=1
20E-26NF15L1flot		indeterminate	
20E-26NF15L1flot		indeterminate	
20E-26NL1	zebu/buffalo	radial carpal	c=1
20E-26NL1	zebu/buffalo	accessory carpal	
20E-26NL1		tooth	
20E-26NL1		skull	c=1
20E-26NL1		long bone	pc=1, c=38

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
20E-26NL1	lm							indeterminate	indeterminate		35	fragme	49
20E-26NL1	mm							indeterminate	long bone		238	fragme	98
20E-26NL1	mm							indeterminate	rib/spine		32	fragme	11
20E-26NL1	mm							indeterminate	indeterminate		38	fragme	23
20E-26NL1	unident							indeterminate	indeterminate			fragme	312
20E-26NL10	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	maxilla	left	1	1/2	18
20E-26NL10	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal e	unfused	2nd phalanx		1	comple	3
20E-26NL10	lm						Distal	indeterminate	scapula		1	1/2	25
20E-26NL10	lm							fused	sesamoid		2	comple	6
20E-26NL10	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			canine		1	comple	2
20E-26NL10	lm							fused	hyoid		1	fragme	2
20E-26NL10	lm							indeterminate	vert		2	fragme	20
20E-26NL10	Mammalia								antler		1	fragme	1
20E-26NL10	lm							fused	carpal/tarsal		2	fragme	12
20E-26NL10	Mammalia								tooth		7	fragme	2
20E-26NL10	Reptilia	Testudines				turtle		fused	carapace		1	fragme	0
20E-26NL10	Reptilia	Testudines				turtle		fused	coracoid		1	fragme	0
20E-26NL10	Osteichthyes					fish		fused	vert		3	fragme	2
20E-26NL10	lm							indeterminate	skull		10	fragme	14
20E-26NL10	lm							indeterminate	long bone		12	fragme	85
20E-26NL10	lm							indeterminate	rib/spine		9	fragme	30
20E-26NL10	lm							indeterminate	indeterminate		11	fragme	37
20E-26NL10	mm							indeterminate	long bone		40	fragme	25
20E-26NL10	mm							indeterminate	rib/spine		26	fragme	12
20E-26NL10	mm							indeterminate	indeterminate		21	fragme	17
20E-26NL10	sm/bird					sm/bird		indeterminate	indeterminate		2	fragme	0
20E-26NL10	sm						Proxim	fused	femur		1	1/2	0
20E-26NL10	unident							indeterminate	indeterminate			fragme	46
20E-26NL10	sm							indeterminate	vert, cervical		1	fragme	0
20E-26NL10	Mammalia								antler		1	fragme	3
20E-26NL10	lm							indeterminate	long bone		2	fragme	2
20E-26NL10	mm							indeterminate	rib/spine		1	fragme	0
20E-26NL10	mm							indeterminate	long bone		4	fragme	1
20E-26NL10	lm/mm							indeterminate	indeterminate		6	fragme	2
20E-26NL2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		indeterminate	astragalus		1	3/4	31

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-26NL1		indeterminate	pc=1, c=29
20E-26NL1		long bone	b=8, c=184
20E-26NL1		rib/spine	c=28
20E-26NL1		indeterminate	b=2, c=32
20E-26NL1		indeterminate	
20E-26NL10	goat	maxilla	dev=adult, maxilla w/ M2-P2
20E-26NL10	zebu/buffalo	2nd phalanx	Bd 14.74
20E-26NL10		scapula	25% calcined extra weight
20E-26NL10		sesamoid	25% calcined extra weight
20E-26NL10	zebu/buffalo	canine	dev=adult, 25% calcined extra weight
20E-26NL10		hyoid	25% calcined extra weight
20E-26NL10		vert	25% calcined extra weight
20E-26NL10		antler	25% calcined extra weight
20E-26NL10		carpal/tarsal	25% calcined extra weight
20E-26NL10		tooth	25% calcined extra weight
20E-26NL10	turtle	carapace	25% calcined extra weight
20E-26NL10	turtle	coracoid	25% calcined extra weight
20E-26NL10	fish	vert	diam = 15, 9.42, 4.9
20E-26NL10		skull	25% calcined extra weight
20E-26NL10		long bone	25% calcined extra weight
20E-26NL10		rib/spine	25% calcined extra weight
20E-26NL10		indeterminate	b=1, 25% calcined extra weight
20E-26NL10		long bone	b=7, c=2, 25% calcined extra weight
20E-26NL10		rib/spine	b=6, c=3, 25% calcined extra weight
20E-26NL10		indeterminate	b=2, 25% calcined extra weight
20E-26NL10	sm/bird	indeterminate	25% calcined extra weight
20E-26NL10		femur	25% calcined extra weight
20E-26NL10		indeterminate	25% calcined extra weight
20E-26NL10		vert, cervical	25% calcined extra weight
20E-26NL10		antler	
20E-26NL10		long bone	b=2
20E-26NL10		rib/spine	c=1
20E-26NL10		long bone	b=2
20E-26NL10		indeterminate	b=2
20E-26NL2	zebu/buffalo	astragalus	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
20E-26NL2	mm							indeterminate	carpal/tarsal		1	1/2	1
20E-26NL2	Mammalia								tooth		10	fragme	6
20E-26NL2	mm							indeterminate	vert		2	fragme	1
20E-26NL2	lm/mm							indeterminate	skull		1	fragme	2
20E-26NL2	lm							indeterminate	long bone		46	fragme	72
20E-26NL2	lm							indeterminate	rib/spine		3	fragme	2
20E-26NL2	lm							indeterminate	indeterminate		18	fragme	16
20E-26NL2	mm							indeterminate	long bone		182	fragme	61
20E-26NL2	mm							indeterminate	rib/spine		27	fragme	0
20E-26NL2	mm							indeterminate	indeterminate		26	fragme	13
20E-26NL2	unident							indeterminate	indeterminate			fragme	120
20E-26NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	left	1	comple	18
20E-26NL3	Mammalia	Artiodactyla				M artiodactyl	Distal	unfused	metapodial		1	1/4	0
20E-26NL3	mm						Proxim	unfused	phalanx		1	1/2	0
20E-26NL3	sm							fused	astragalus		1	fragme	0
20E-26NL3	mm							indeterminate	vert, caudal		2	fragme	1
20E-26NL3	Reptilia	Squamata	Colubridae			snake		fused	vert		2	fragme	1
20E-26NL3	Aves					bird		fused	1st phalanx		1	comple	0
20E-26NL3	sm							indeterminate	acetabulum		1	fragme	0
20E-26NL3	sm							indeterminate	long bone		4	fragme	0
20E-26NL3	Mammalia								antler		1	fragme	0
20E-26NL3	Mammalia								tooth		42	fragme	14
20E-26NL3	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		unerupted	premolar		1	comple	1
20E-26NL3	mm							fused	costal cartilage		1	fragme	0
20E-26NL3	Mammalia	Artiodactyla	Bovidae			L bovid		fused	Lateral Malleolus		2	comple	7
20E-26NL3	lm						Distal	indeterminate	phalanx		2	1/4	4
20E-26NL3	lm							fused	sesamoid		1	comple	2
20E-26NL3	mm							fused	sesamoid		1	comple	0
20E-26NL3	lm							indeterminate	ilium		1	<1/4	5
20E-26NL3	lm							indeterminate	vert		1	<1/4	2
20E-26NL3	lm							indeterminate	skull		4	fragme	14
20E-26NL3	lm/mm							indeterminate	skull		2	fragme	1
20E-26NL3	lm							indeterminate	long bone		113	fragme	188
20E-26NL3	lm							indeterminate	rib/spine		27	fragme	29
20E-26NL3	lm							indeterminate	indeterminate		41	fragme	53

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-26NL2		carpal/tarsal	pc=1
20E-26NL2		tooth	
20E-26NL2		vert	
20E-26NL2		skull	c=1
20E-26NL2		long bone	pc=2, c=10
20E-26NL2		rib/spine	c=3
20E-26NL2		indeterminate	c=5
20E-26NL2		long bone	b=9, c=48
20E-26NL2		rib/spine	b=6, c=14
20E-26NL2		indeterminate	c=14
20E-26NL2		indeterminate	
20E-26NL3	zebu/buffalo	2nd phalanx	GL 45.25, Bp 31.03, Bd 26.20
20E-26NL3	M artiodactyl	metapodial	
20E-26NL3		phalanx	Bp 11/15
20E-26NL3		astragalus	
20E-26NL3		vert, caudal	
20E-26NL3	snake	vert	
20E-26NL3	bird	1st phalanx	GL 15.37
20E-26NL3		acetabulum	
20E-26NL3		long bone	b=1
20E-26NL3		antler	
20E-26NL3		tooth	
20E-26NL3	sheep/goat/de	premolar	
20E-26NL3		costal cartilage	
20E-26NL3	L bovid	Lateral Malleolus	
20E-26NL3		phalanx	
20E-26NL3		sesamoid	
20E-26NL3		sesamoid	
20E-26NL3		ilium	w=1, inc=1, incised lines on ilium blade
20E-26NL3		vert	
20E-26NL3		skull	
20E-26NL3		skull	
20E-26NL3		long bone	b=5, pc=4, c=8
20E-26NL3		rib/spine	b=5, cut=1
20E-26NL3		indeterminate	b=6, pc=6, c=3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
20E-26NL3	mm							indeterminate	long bone		269	fragme	157
20E-26NL3	mm							indeterminate	rib/spine		60	fragme	17
20E-26NL3	mm							indeterminate	indeterminate		111	fragme	57
20E-26NL3	unident							indeterminate	indeterminate			fragme	242
20E-26NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	2nd phalanx		1	1/4	3
20E-26NL4	lm						Distal	indeterminate	phalanx		2	<1/4	2
20E-26NL4	Mammalia								antler		2	fragme	1
20E-26NL4	Osteichthyes					fish		indeterminate	vert		1	comple	0
20E-26NL4	Reptilia	Squamata				snake		fused	mandible		1	fragme	0
20E-26NL4	mm/sm							unfused	vert, caudal		1	fragme	0
20E-26NL4	Mammalia								tooth		6	fragme	2
20E-26NL4	mm							fused	costal cartilage		1	fragme	1
20E-26NL4	lm							indeterminate	long bone		22	fragme	25
20E-26NL4	lm							indeterminate	rib/spine		7	fragme	6
20E-26NL4	lm							indeterminate	indeterminate		11	fragme	7
20E-26NL4	mm							indeterminate	long bone		71	fragme	21
20E-26NL4	mm							indeterminate	rib/spine		17	fragme	3
20E-26NL4	mm							indeterminate	indeterminate		13	fragme	5
20E-26NL4	unident							indeterminate	indeterminate			fragme	20
20E-26NL5	Reptilia	Sauria				lizard		indeterminate	vert		1	comple	0
20E-26NL5	Reptilia	Testudines				turtle		fused	carapace		4	fragme	2
20E-26NL5	Reptilia					reptile		indeterminate	vert		1	1/2	0
20E-26NL5	osteichthyes					fish		indeterminate	vert		1	1/2	0
20E-26NL5	lm/mm							indeterminate	long bone		2	fragme	1
20E-26NL5	Mammalia	Rodentia				rat/mouse		fused	mandible		2	fragme	0
20E-26NL5	Mammalia	Rodentia				rat/mouse	Proxim	fused	femur		1	fragme	0
20E-26NL5	Mammalia	Rodentia				rat/mouse	Distal	fused	femur		1	fragme	0
20E-26NL5	Mammalia	Rodentia				rat/mouse		fused	innominate		1	fragme	0
20E-26NL5	Mammalia	Rodentia				rat/mouse	Distal	fused	tibia		1	fragme	0
20E-26NL5	Mammalia	Rodentia				rat/mouse		fused	long bone		6	fragme	1
20E-26NL5	Mammalia	Rodentia				rat/mouse		fused	vert		3	fragme	0
20E-26NL5	mm						Proxim	unfused	phalanx		1	fragme	0
20E-26NL5	sm						Distal	indeterminate	femur		1	1/2	0
20E-26NL5	sm						Proxim	indeterminate	calcaneus		1	1/2	0
20E-26NL5	mm						Proxim	indeterminate	calcaneus		1	1/4	3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-26NL3		long bone	b=41, pc=34, c=22
20E-26NL3		rib/spine	b=9, c=2
20E-26NL3		indeterminate	b=18, c=6
20E-26NL3		indeterminate	
20E-26NL4	zebu/buffalo	2nd phalanx	
20E-26NL4		phalanx	
20E-26NL4		antler	
20E-26NL4	fish	vert	
20E-26NL4	snake	mandible	
20E-26NL4		vert, caudal	
20E-26NL4		tooth	
20E-26NL4		costal cartilage	
20E-26NL4		long bone	b=7
20E-26NL4		rib/spine	b=2
20E-26NL4		indeterminate	b=3
20E-26NL4		long bone	b=17, c=4
20E-26NL4		rib/spine	b=4
20E-26NL4		indeterminate	
20E-26NL4		indeterminate	
20E-26NL5	lizard	vert	
20E-26NL5	turtle	carapace	
20E-26NL5	reptile	vert	pc=1
20E-26NL5	fish	vert	diam = 10.28
20E-26NL5		long bone	w=2
20E-26NL5	rat/mouse	mandible	
20E-26NL5	rat/mouse	femur	
20E-26NL5	rat/mouse	femur	
20E-26NL5	rat/mouse	innominate	
20E-26NL5	rat/mouse	tibia	
20E-26NL5	rat/mouse	long bone	
20E-26NL5	rat/mouse	vert	
20E-26NL5		phalanx	
20E-26NL5		femur	Bd 6.68
20E-26NL5		calcaneus	
20E-26NL5		calcaneus	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-26NL5	mm							indeterminate	scapula		1	1/4	2
20E-26NL5	Mammalia	Artiodactyla	Suidae	Sus		pig	Proxim	fused	2nd metatarsal		1	1/4	1
20E-26NL5	Mammalia								antler		2	fragme	12
20E-26NL5	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	4
20E-26NL5	mm							fused	costal cartilage		2	fragme	1
20E-26NL5	lm							indeterminate	carpal/tarsal		3	1/4	15
20E-26NL5	mm							indeterminate	carpal/tarsal		1	1/4	2
20E-26NL5	lm							indeterminate	sesamoid		2	fragme	1
20E-26NL5	mm							indeterminate	sesamoid		1	fragme	0
20E-26NL5	sm							indeterminate	long bone		2	fragme	0
20E-26NL5	Aves					bird		indeterminate	long bone		2	fragme	1
20E-26NL5	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		unerupted	molar		1	comple	1
20E-26NL5	Mammalia								tooth		18	fragme	6
20E-26NL5	lm							indeterminate	scapula		2	1/4	23
20E-26NL5	lm							indeterminate	mandible		2	<1/4	17
20E-26NL5	mm							indeterminate	mandible		1	<1/4	1
20E-26NL5	mm							fused	petris temporal		1	fragme	0
20E-26NL5	lm							indeterminate	vert		13	fragme	73
20E-26NL5	lm							unfused	vert		1	fragme	5
20E-26NL5	mm							indeterminate	vert		6	fragme	5
20E-26NL5	mm							unfused	vert		2	fragme	1
20E-26NL5	Aves					bird		indeterminate	skull		3	fragme	1
20E-26NL5	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		2	fragme	2
20E-26NL5	lm							indeterminate	long bone		69	fragme	175
20E-26NL5	lm							indeterminate	rib/spine		36	fragme	111
20E-26NL5	lm							indeterminate	rib		1	fragme	7
20E-26NL5	lm							indeterminate	indeterminate		64	fragme	143
20E-26NL5	mm							indeterminate	long bone		220	fragme	102
20E-26NL5	mm							indeterminate	rib/spine		59	fragme	24
20E-26NL5	mm							indeterminate	rib		1	fragme	0
20E-26NL5	mm							indeterminate	indeterminate		68	fragme	62
20E-26NL5	unident							indeterminate	indeterminate			fragme	146
20E-26NL5	Mammalia	Artiodactyla	Cervidae			deer sp.			canine	lower	1	fragme	0
20E-26NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			incisor		2	fragme	4
20E-26NL5	Mammalia								tooth		10	fragme	6

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-26NL5		scapula	
20E-26NL5	pig	2nd metatarsal	
20E-26NL5		antler	
20E-26NL5	L artiodactyl	metapodial	
20E-26NL5		costal cartilage	
20E-26NL5		carpal/tarsal	b=1
20E-26NL5		carpal/tarsal	pc=1
20E-26NL5		sesamoid	c=2
20E-26NL5		sesamoid	
20E-26NL5		long bone	c=2
20E-26NL5	bird	long bone	
20E-26NL5	sheep/goat/de	molar	
20E-26NL5		tooth	
20E-26NL5		scapula	
20E-26NL5		mandible	
20E-26NL5		mandible	
20E-26NL5		petris temporal	
20E-26NL5		vert	
20E-26NL5		vert	
20E-26NL5		vert	
20E-26NL5		vert	
20E-26NL5	bird	skull	
20E-26NL5	bird/reptile	indeterminate	
20E-26NL5		long bone	b=9
20E-26NL5		rib/spine	c=2
20E-26NL5		rib	
20E-26NL5		indeterminate	pc=1, c=1
20E-26NL5		long bone	b=35, c=29
20E-26NL5		rib/spine	b=12, c=6
20E-26NL5		rib	
20E-26NL5		indeterminate	b=4
20E-26NL5		indeterminate	
20E-26NL5	deer sp.	canine	
20E-26NL5	zebu/buffalo	incisor	
20E-26NL5		tooth	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-26NL5	lm							fused	accessory carpal		1	fragme	2
20E-26NL5	Mammalia	Rodentia				rat/mouse		indeterminate	long bone		9	fragme	0
20E-26NL5	Mammalia	Rodentia				rat/mouse		indeterminate	vert, caudal		1	fragme	0
20E-26NL5	lm							indeterminate	long bone		12	fragme	11
20E-26NL5	lm							indeterminate	rib/spine		9	fragme	19
20E-26NL5	mm							indeterminate	long bone		10	fragme	4
20E-26NL5	mm							indeterminate	rib/spine		2	fragme	0
20E-26NL5	mm							indeterminate	long bone		5	fragme	3
20E-26NL5	unident							indeterminate	indeterminate			fragme	18
20E-26NL5	lm							indeterminate	long bone		5	fragme	6
20E-26NL5	mm							indeterminate	long bone		9	fragme	2
20E-26NL5	mm							indeterminate	rib/spine		2	fragme	0
20E-26NL5	unident							indeterminate	indeterminate			fragme	0
20E-26NL6	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		5	fragme	8
20E-26NL6	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo	Distal	fused	metacarpal		1	1/4	39
20E-26NL6	Reptilia	Sauria				lizard		fused	vert		1	fragme	1
20E-26NL6	Mammalia	Rodentia				rat/mouse		fused	maxilla		1	fragme	0
20E-26NL6	Mammalia	Rodentia				rat/mouse		fused	femur	right	2	fragme	0
20E-26NL6	Mammalia	Rodentia				rat/mouse		fused	long bone		2	fragme	0
20E-26NL6	Mammalia	Rodentia				rat/mouse		indeterminate	indeterminate		6	fragme	0
20E-26NL6	lm/mm							indeterminate	long bone		1	fragme	1
20E-26NL6	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar	lower	1	comple	11
20E-26NL6	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar	lower	1	comple	4
20E-26NL6	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			canine		1	comple	1
20E-26NL6	Mammalia								tooth		6	fragme	3
20E-26NL6	mm						Distal	indeterminate	phalanx		1	<1/4	0
20E-26NL6	lm							indeterminate	vert		3	fragme	27
20E-26NL6	lm							indeterminate	skull		3	fragme	12
20E-26NL6	lm							indeterminate	long bone		21	fragme	53
20E-26NL6	lm							indeterminate	rib/spine		20	fragme	30
20E-26NL6	lm							indeterminate	indeterminate		18	fragme	59
20E-26NL6	mm							indeterminate	long bone		82	fragme	40
20E-26NL6	mm							indeterminate	rib/spine		11	fragme	5
20E-26NL6	mm							indeterminate	indeterminate		10	fragme	9
20E-26NL6	unident							indeterminate	indeterminate			fragme	103

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-26NL5		accessory carpal	
20E-26NL5	rat/mouse	long bone	
20E-26NL5	rat/mouse	vert, caudal	
20E-26NL5		long bone	b=3, c=2
20E-26NL5		rib/spine	pc=1
20E-26NL5		long bone	b=3
20E-26NL5		rib/spine	
20E-26NL5		long bone	b=1
20E-26NL5		indeterminate	
20E-26NL5		long bone	b=1, pc=2
20E-26NL5		long bone	pc=2
20E-26NL5		rib/spine	b=2
20E-26NL5		indeterminate	
20E-26NL6	softshell turtle	carapace	c=3
20E-26NL6	buffalo	metacarpal	
20E-26NL6	lizard	vert	
20E-26NL6	rat/mouse	maxilla	
20E-26NL6	rat/mouse	femur	
20E-26NL6	rat/mouse	long bone	
20E-26NL6	rat/mouse	indeterminate	
20E-26NL6		long bone	w=1
20E-26NL6	zebu/buffalo	molar	dev=l
20E-26NL6	zebu/buffalo	premolar	dev=j
20E-26NL6	zebu/buffalo	canine	dev=adult/old adult, severely worn
20E-26NL6		tooth	
20E-26NL6		phalanx	b=1
20E-26NL6		vert	cut=1
20E-26NL6		skull	
20E-26NL6		long bone	c=4, c=3
20E-26NL6		rib/spine	
20E-26NL6		indeterminate	
20E-26NL6		long bone	b=10, c=9
20E-26NL6		rib/spine	b=3, pc=2, c=1
20E-26NL6		indeterminate	
20E-26NL6		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-26NL7	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		6	fragme	12
20E-26NL7	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	intermediate carpal		1	comple	6
20E-26NL7	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare	Distal	fused	humerus	right	1	1/2	2
20E-26NL7	mm							unfused	sacrum		1	comple	0
20E-26NL7	Mammalia								antler		3	fragme	2
20E-26NL7	mm							indeterminate	hyoid		1	fragme	0
20E-26NL7	Reptilia	Sauria				lizard		fused	mandible	left	1	fragme	0
20E-26NL7	Mammalia	Rodentia				rat/mouse		fused	mandible		2	fragme	0
20E-26NL7	Mammalia	Rodentia				rat/mouse		fused	incisor		1	fragme	0
20E-26NL7	Mammalia	Rodentia				rat/mouse		fused	vert, caudal		3	fragme	0
20E-26NL7	Mammalia	Rodentia				rat/mouse		fused	long bone		1	fragme	0
20E-26NL7	Aves					bird		indeterminate	long bone		6	fragme	5
20E-26NL7	lm/mm							indeterminate	long bone		2	fragme	1
20E-26NL7	Mammalia	Artiodactyla				L ruminant		unerupted	molar		1	fragme	1
20E-26NL7	Mammalia								tooth		7	fragme	4
20E-26NL7	lm							indeterminate	costal cartilage		2	fragme	5
20E-26NL7	mm							fused	accessory carpal		1	comple	1
20E-26NL7	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	1
20E-26NL7	lm							indeterminate	vert		4	fragme	36
20E-26NL7	lm/mm							indeterminate	vert		2	fragme	3
20E-26NL7	lm							indeterminate	mandible		1	1/4	10
20E-26NL7	lm							indeterminate	scapula		1	<1/4	8
20E-26NL7	lm/mm							indeterminate	skull		10	fragme	12
20E-26NL7	lm							indeterminate	long bone		42	fragme	91
20E-26NL7	lm							indeterminate	rib/spine		13	fragme	33
20E-26NL7	lm							indeterminate	indeterminate		41	fragme	100
20E-26NL7	mm							indeterminate	long bone		137	fragme	69
20E-26NL7	mm							indeterminate	rib/spine		12	fragme	4
20E-26NL7	mm							indeterminate	indeterminate		19	fragme	14
20E-26NL7	unident							indeterminate	indeterminate			fragme	152
20E-26NL8	lm						Distal	indeterminate	scapula		1	1/2	25
20E-26NL8	lm							indeterminate	calcaneus	left	1	1/2	32
20E-26NL8	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	3rd Phalanx	right	1	3/4	14
20E-26NL8	Mammalia	Perissodactyl	Equidae	Equus		horse		fused	distal sesamoid		1	1/2	3
20E-26NL8	Mammalia	Artiodactyla				M artiodactyl	Distal	unfused	metapodial		1	1/2	15

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-26NL7	softshell turtle	carapace	c=6, 15% calcined extra weight
20E-26NL7	zebu/buffalo	intermediate	15% calcined extra weight
20E-26NL7	Indian Hare	humerus	Bd 12.23
20E-26NL7		sacrum	15% calcined extra weight
20E-26NL7		antler	15% calcined extra weight
20E-26NL7		hyoid	15% calcined extra weight
20E-26NL7	lizard	mandible	15% calcined extra weight
20E-26NL7	rat/mouse	mandible	15% calcined extra weight
20E-26NL7	rat/mouse	incisor	15% calcined extra weight
20E-26NL7	rat/mouse	vert, caudal	15% calcined extra weight
20E-26NL7	rat/mouse	long bone	15% calcined extra weight
20E-26NL7	bird	long bone	c=1, 15% calcined extra weight
20E-26NL7		long bone	pc=1, w=2, 15% calcined extra weight
20E-26NL7	L ruminant	molar	b=1, 15% calcined extra weight
20E-26NL7		tooth	15% calcined extra weight
20E-26NL7		costal cartilag	15% calcined extra weight
20E-26NL7		accessory ca	b=1, 15% calcined extra weight
20E-26NL7	L artiodactyl	metapodial	b=1, 15% calcined extra weight
20E-26NL7		vert	b=1, 15% calcined extra weight
20E-26NL7		vert	15% calcined extra weight
20E-26NL7		mandible	15% calcined extra weight
20E-26NL7		scapula	15% calcined extra weight
20E-26NL7		skull	b=1, 15% calcined extra weight
20E-26NL7		long bone	b=11, cut=1, 15% calcined extra weight
20E-26NL7		rib/spine	b=2, c=1, 15% calcined extra weight
20E-26NL7		indeterminate	b=2, c=1, 15% calcined extra weight
20E-26NL7		long bone	b=29, pc=5, c=10, 15% calcined extra weight
20E-26NL7		rib/spine	b=5, 15% calcined extra weight
20E-26NL7		indeterminate	b=3, 15% calcined extra weight
20E-26NL7		indeterminate	15% calcined extra weight
20E-26NL8		scapula	15% calcined extra weight
20E-26NL8		calcaneus	15% calcined extra weight
20E-26NL8	zebu	3rd Phalanx	Ld 47.96
20E-26NL8	horse	distal sesamo	GB 42.6 (estimated from half)
20E-26NL8	M artiodactyl	metapodial	25% calcined extra weight

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-26NL8	mm						Distal	unfused	long bone		1	fragme	4
20E-26NL8	lm							fused	accessory carpal		1	comple	2
20E-26NL8	mm						Proxim	unfused	phalanx		1	comple	1
20E-26NL8	lm							fused	sesamoid		1	comple	2
20E-26NL8	mm							fused	sesamoid		1	comple	1
20E-26NL8	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	1
20E-26NL8	Mammalia								antler		1	fragme	2
20E-26NL8	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	0
20E-26NL8	sm						Proxim	indeterminate	femur		1	1/4	0
20E-26NL8	Reptilia	Testudines				turtle		fused	vert		1	1/2	0
20E-26NL8	sm							indeterminate	long bone		12	fragme	2
20E-26NL8	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			canine		1	comple	1
20E-26NL8	Mammalia								tooth		4	fragme	2
20E-26NL8	lm							indeterminate	vert		8	fragme	31
20E-26NL8	lm							unfused	vert		1	fragme	4
20E-26NL8	lm/mm							indeterminate	skull		4	fragme	5
20E-26NL8	lm							indeterminate	long bone		40	fragme	133
20E-26NL8	lm							indeterminate	rib/spine		6	fragme	13
20E-26NL8	lm							indeterminate	indeterminate		21	fragme	101
20E-26NL8	mm							indeterminate	long bone		118	fragme	67
20E-26NL8	mm							indeterminate	rib/spine		19	fragme	13
20E-26NL8	mm							indeterminate	indeterminate		56	fragme	53
20E-26NL8	unident							indeterminate	indeterminate			fragme	109
20E-26NL9	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar	upper	1	3/4	38
20E-26NL9	lm							fused	carpal/tarsal		1	fragme	7
20E-26NL9	lm							fused	sesamoid		1	comple	3
20E-26NL9	mm						Proxim	fused	phalanx		1	1/4	2
20E-26NL9	mm							fused	costal cartilage		1	fragme	3
20E-26NL9	Mammalia								tooth		9	fragme	6
20E-26NL9	Mammalia								antler		1	fragme	0
20E-26NL9	sm						Proxim	fused	femur	right	2	comple	0
20E-26NL9	Reptilia	Squamata				snake		fused	vert		1	fragme	1
20E-26NL9	sm							indeterminate	vert		1	fragme	0
20E-26NL9	Reptilia					reptile		indeterminate	skull		1	fragme	1
20E-26NL9	lm							indeterminate	vert		2	fragme	26

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-26NL8		long bone	25% calcined extra weight
20E-26NL8		accessory ca	25% calcined extra weight
20E-26NL8		phalanx	25% calcined extra weight
20E-26NL8		sesamoid	25% calcined extra weight
20E-26NL8		sesamoid	25% calcined extra weight
20E-26NL8	softshell turtle	carapace	c=1, 25% calcined extra weight
20E-26NL8		antler	25% calcined extra weight
20E-26NL8	softshell turtle	carapace	b=1, 25% calcined extra weight
20E-26NL8		femur	25% calcined extra weight
20E-26NL8	turtle	vert	25% calcined extra weight
20E-26NL8		long bone	b=1, 25% calcined extra weight
20E-26NL8	sheep/goat	canine	25% calcined extra weight
20E-26NL8		tooth	b=1, 25% calcined extra weight
20E-26NL8		vert	25% calcined extra weight
20E-26NL8		vert	25% calcined extra weight
20E-26NL8		skull	25% calcined extra weight
20E-26NL8		long bone	b=10, 25% calcined extra weight
20E-26NL8		rib/spine	b=2, 25% calcined extra weight
20E-26NL8		indeterminate	b=2, 25% calcined extra weight
20E-26NL8		long bone	b=16, pc=9, c=8, 25% calcined extra weight
20E-26NL8		rib/spine	b=2, 25% calcined extra weight
20E-26NL8		indeterminate	b=2, c=4, 25% calcined extra weight
20E-26NL8		indeterminate	25% calcined extra weight
20E-26NL9	zebu/buffalo	molar	dev=adult, 25% calcined extra weight
20E-26NL9		carpal/tarsal	25% calcined extra weight
20E-26NL9		sesamoid	25% calcined extra weight
20E-26NL9		phalanx	25% calcined extra weight
20E-26NL9		costal cartilag	25% calcined extra weight
20E-26NL9		tooth	25% calcined extra weight
20E-26NL9		antler	25% calcined extra weight
20E-26NL9		femur	25% calcined extra weight
20E-26NL9	snake	vert	25% calcined extra weight
20E-26NL9		vert	25% calcined extra weight
20E-26NL9	reptile	skull	c=1, 25% calcined extra weight
20E-26NL9		vert	25% calcined extra weight

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
20E-26NL9	lm/mm							indeterminate	vert		2	fragme	3
20E-26NL9	Aves					bird		indeterminate	long bone		1	fragme	1
20E-26NL9	lm							indeterminate	skull		9	fragme	27
20E-26NL9	lm							indeterminate	long bone		24	fragme	86
20E-26NL9	lm							indeterminate	acetabulum		1	1/4	20
20E-26NL9	lm							indeterminate	indeterminate		33	fragme	81
20E-26NL9	mm							indeterminate	long bone		45	fragme	40
20E-26NL9	mm							indeterminate	rib/spine		14	fragme	15
20E-26NL9	mm							indeterminate	rib		2	fragme	3
20E-26NL9	mm							indeterminate	skull		7	fragme	9
20E-26NL9	mm							indeterminate	indeterminate		14	fragme	20
20E-26NL9	unident							indeterminate	indeterminate			fragme	198
20E-26NL9	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	calcaneus	right	1	3/4	77
20E-26NL9	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	1st phalanx	right	1	3/4	18
20E-26NL9	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	3rd Phalanx	right	1	comple	15
20E-26NL9	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo	Distal	fused	femur	left	1	1/2	142
20E-26NL9	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	2
20E-26NL9	Reptilia	Squamata	Colubridae			snake		fused	vert		1	3/4	1
20E-26NL9	lm/mm							indeterminate	indeterminate		1	fragme	0
20E-26NL9	Mammalia	Rodentia				rat/mouse		fused	mandible		3	fragme	1
20E-26NL9	Mammalia	Rodentia				rat/mouse		fused	maxilla	left	1	fragme	0
20E-26NL9	Mammalia	Rodentia				rat/mouse		fused	innominate		2	fragme	0
20E-26NL9	Mammalia	Rodentia				rat/mouse		fused	femur		5	fragme	1
20E-26NL9	Mammalia	Rodentia				rat/mouse		fused	vert		4	fragme	0
20E-26NL9	Mammalia	Rodentia				rat/mouse		fused	long bone		5	fragme	0
20E-26NL9	Mammalia	Rodentia				rat/mouse		fused	scapula		1	fragme	0
20E-26NL9	sm							indeterminate	vert		3	fragme	1
20E-26NL9	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare	Distal	fused	scapula		1	1/4	0
20E-26NL9	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar	upper	1	comple	6
20E-26NL9	Mammalia								tooth		12	fragme	15
20E-26NL9	mm						Distal	indeterminate	phalanx		1	1/2	3
20E-26NL9	mm							fused	costal cartilage		3	fragme	2
20E-26NL9	lm/mm							indeterminate	ilium		1	1/4	12
20E-26NL9	lm							indeterminate	sesamoid		4	fragme	8
20E-26NL9	lm							indeterminate	mandible		1	fragme	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-26NL9		vert	25% calcined extra weight
20E-26NL9	bird	long bone	25% calcined extra weight
20E-26NL9		skull	25% calcined extra weight
20E-26NL9		long bone	b=1, c=2, 25% calcined extra weight
20E-26NL9		acetabulum	25% calcined extra weight
20E-26NL9		indeterminate	pc=3, c=5, 25% calcined extra weight
20E-26NL9		long bone	b=2, c=5, 25% calcined extra weight
20E-26NL9		rib/spine	25% calcined extra weight
20E-26NL9		rib	25% calcined extra weight
20E-26NL9		skull	25% calcined extra weight
20E-26NL9		indeterminate	pc=1, 25% calcined extra weight
20E-26NL9		indeterminate	25% calcined extra weight
20E-26NL9	zebu	calcaneus	GB 66.74
20E-26NL9	zebu/buffalo	1st phalanx	Bp 25.63
20E-26NL9	zebu	3rd Phalanx	DLS 60.49, Ld 51.01, MBS 22.58
20E-26NL9	buffalo	femur	10% calcined extra weight
20E-26NL9	softshell turtle	carapace	10% calcined extra weight
20E-26NL9	snake	vert	b=1, 10% calcined extra weight
20E-26NL9		indeterminate	w=1, polished and ground into tapered point
20E-26NL9	rat/mouse	mandible	10% calcined extra weight
20E-26NL9	rat/mouse	maxilla	10% calcined extra weight
20E-26NL9	rat/mouse	innominate	10% calcined extra weight
20E-26NL9	rat/mouse	femur	10% calcined extra weight
20E-26NL9	rat/mouse	vert	10% calcined extra weight
20E-26NL9	rat/mouse	long bone	10% calcined extra weight
20E-26NL9	rat/mouse	scapula	10% calcined extra weight
20E-26NL9		vert	10% calcined extra weight
20E-26NL9	Indian Hare	scapula	10% calcined extra weight
20E-26NL9	zebu/buffalo	premolar	dev=adult, 10% calcined extra weight
20E-26NL9		tooth	10% calcined extra weight
20E-26NL9		phalanx	Bd 12.11
20E-26NL9		costal cartilag	10% calcined extra weight
20E-26NL9		ilium	10% calcined extra weight
20E-26NL9		sesamoid	10% calcined extra weight
20E-26NL9		mandible	10% calcined extra weight

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-26NL9	lm							indeterminate	vert		6	fragme	66
20E-26NL9	lm/mm							indeterminate	vert		2	fragme	5
20E-26NL9	lm/mm							indeterminate	skull		8	fragme	10
20E-26NL9	lm							indeterminate	long bone		45	fragme	124
20E-26NL9	lm							indeterminate	rib/spine		14	fragme	24
20E-26NL9	lm							indeterminate	rib		2	fragme	14
20E-26NL9	lm							indeterminate	indeterminate		49	fragme	154
20E-26NL9	mm							indeterminate	long bone		94	fragme	55
20E-26NL9	mm							indeterminate	rib/spine		3	fragme	1
20E-26NL9	mm							indeterminate	rib		3	fragme	1
20E-26NL9	mm							indeterminate	indeterminate		29	fragme	21
20E-28NF4	Aves					L bird		fused	Carpometacarpus		1	fragme	2
20E-28NF4	unident							indeterminate	indeterminate			fragme	22
20E-28NF4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Astragalus	Left	1	Comple	45
20E-28NF4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd Phalanx		1	3/4+	9
20E-28NF4	Reptilia	Squamata				snake		fused	Vert		1	Comple	2
20E-28NF4	Reptilia	Testudines	Emydidae			box turtle		fused	Carapace		1	fragment	
20E-28NF4	Mammalia	Rodentia				rat/mouse		Fusing	Femur		1	Comple	0
20E-28NF4	Mammalia	Rodentia				rat/mouse		Prox=Unfuse	Humerus		1	3/4+	0
20E-28NF4	lm						Proxim	indeterminate	Fibula?		1	fragment	
20E-28NF4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	2nd Phalanx		1	1/4	8
20E-28NF4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Ulna?		1	<1/4	
20E-28NF4	sm							indeterminate	vert, caudal		1	1/4	0
20E-28NF4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Shaft	fused	Metatarsal		1	1/4	11
20E-28NF4	Mammalia	Artiodactyla	Cervidae/Bovidae			cervid or bovid			Antler		1	fragme	8
20E-28NF4	mm							Unfused	Ilium	Left	1	1/4 - 1/	3
20E-28NF4	lm							fused	Sesamoid		2	Comple	5
20E-28NF4	lm							indeterminate	long bone		10	fragme	35
20E-28NF4	lm							indeterminate	rib/spine		13	fragme	53
20E-28NF4	lm						Blade	indeterminate	Scapula		1	fragme	8
20E-28NF4	lm							fused	Costal Cartilage		1	fragme	1
20E-28NF4	lm								Tooth		1	fragme	10
20E-28NF4	mm							indeterminate	rib/spine		9	fragme	5
20E-28NF4	mm							indeterminate	long bone		16	fragme	17
20E-28NF4	mm							indeterminate	indeterminate		7	fragme	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-26NL9		vert	10% calcined extra weight
20E-26NL9		vert	10% calcined extra weight
20E-26NL9		skull	10% calcined extra weight
20E-26NL9		long bone	b=2, c=3, 10% calcined extra weight
20E-26NL9		rib/spine	b=1, 10% calcined extra weight
20E-26NL9		rib	10% calcined extra weight
20E-26NL9		indeterminate	b=1, c=2, 10% calcined extra weight
20E-26NL9		long bone	b=8, c=25, 10% calcined extra weight
20E-26NL9		rib/spine	b=1, 10% calcined extra weight
20E-26NL9		rib	10% calcined extra weight
20E-26NL9		indeterminate	b=3, c=1, 10% calcined extra weight
20E-28NF4	L bird	Carpometacarpus	
20E-28NF4		indeterminate	b=11, c=5
20E-28NF4	zebu/buffalo	Astragalus	cut=1, GLl 59.4 GLm 55.9 Bd 37.7 Dm 35.6 Dl 34.1
20E-28NF4	zebu/buffalo	2nd Phalanx	
20E-28NF4	snake	Vert	b=1
20E-28NF4	box turtle	Carapace	neural part of carapace?
20E-28NF4	rat/mouse	Femur	
20E-28NF4	rat/mouse	Humerus	
20E-28NF4		Fibula?	no weight recorded
20E-28NF4	zebu/buffalo	2nd Phalanx	
20E-28NF4	zebu/buffalo	Ulna?	no weight recorded
20E-28NF4		vert, caudal	b=1
20E-28NF4	zebu/buffalo	Metatarsal	
20E-28NF4	cervid or bovid	Antler	
20E-28NF4		Ilium	
20E-28NF4		Sesamoid	b=2
20E-28NF4		long bone	b=5, c=1
20E-28NF4		rib/spine	b=6
20E-28NF4		Scapula	
20E-28NF4		Costal Cartilage	
20E-28NF4		Tooth	
20E-28NF4		rib/spine	b=5, c=3
20E-28NF4		long bone	b=3, pc=4, c=3
20E-28NF4		indeterminate	b=2, c=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NF4	mm							fused	Costal Cartilage		1	fragme	0
20E-28NF4	sm							indeterminate	long bone		2	fragme	1
20E-28NF4	lm							indeterminate	indeterminate		27	fragme	60
20E-28NF4	lm						Distal	indeterminate	Phalanx 1 or 2		1	<1/4	1
20E-28NF4	Mammalia								Tooth		1	fragme	0
20E-28NF5	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	2nd Phalanx		1	Comple	15
20E-28NF5	sm							indeterminate	Metapodial		1	Comple	0
20E-28NF5	Mammalia	Rodentia				rat/mouse		fused	Atlas		1	Comple	0
20E-28NF5	Mammalia	Rodentia				rat/mouse		fused	Mandible	Left	1	fragme	0
20E-28NF5	lm							indeterminate	long bone		6	fragme	20
20E-28NF5	lm							indeterminate	rib/spine		2	fragme	19
20E-28NF5	lm						Arch	indeterminate	Vert		1	fragme	6
20E-28NF5	lm							indeterminate	Skull		2	fragme	5
20E-28NF5	lm							indeterminate	indeterminate		6	fragme	11
20E-28NF5	mm							indeterminate	long bone		8	fragme	5
20E-28NF5	mm							indeterminate	indeterminate		14	fragme	7
20E-28NF5	Mammalia	Artiodactyla	Bovidae			bovid	Proxim	Fused	1st Phalanx		1	1/4 - 1/	10
20E-28NF5	Mammalia	Artiodactyla	Bovidae			L bovid	Distal	fused	1st Phalanx		1	1/4	7
20E-28NF5	lm						Distal	indeterminate	Tibia		1	fragme	49
20E-28NF5	Mammalia	Rodentia				rat/mouse		fused	Mandible	Right	1	fragme	0
20E-28NF5	Mammalia	Rodentia				rat/mouse		fused	Mandible	Left	1	fragme	0
20E-28NF5	lm							indeterminate	Skull		1	fragme	10
20E-28NF5	lm							indeterminate	rib/spine		2	fragme	8
20E-28NF5	mm							indeterminate	rib/spine		4	fragme	2
20E-28NF5	mm							indeterminate	long bone		10	fragme	12
20E-28NF5	mm							indeterminate	Vert		1	fragme	2
20E-28NF5	mm							indeterminate	indeterminate		5	fragme	7
20E-28NF5	unident							indeterminate	indeterminate			fragme	5
20E-28NF5	lm							indeterminate	long bone		2	fragme	1
20E-28NF5	lm							indeterminate	rib/spine		1	fragme	1
20E-28NF5	mm							indeterminate	rib/spine		2	fragme	0
20E-28NF5	lm							indeterminate	long bone		2	fragme	3
20E-28NL0	sm/bird					sm/bird		indeterminate	long bone		2	fragme	1
20E-28NL0	lm							Unfused	indeterminate		1	fragme	2
20E-28NL0	lm/mm							indeterminate	3rd Phalanx		1	<1/4	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NF4		Costal Cartila	b=1
20E-28NF4		long bone	
20E-28NF4		indeterminate	b=4
20E-28NF4		Phalanx 1 or 2	
20E-28NF4		Tooth	
20E-28NF5	zebu	2nd Phalanx	Bp 28 Bd 22.7 GL 41.1
20E-28NF5		Metapodial	GL 34.1
20E-28NF5	rat/mouse	Atlas	
20E-28NF5	rat/mouse	Mandible	
20E-28NF5		long bone	
20E-28NF5		rib/spine	cut=1
20E-28NF5		Vert	
20E-28NF5		Skull	
20E-28NF5		indeterminate	
20E-28NF5		long bone	b=1
20E-28NF5		indeterminate	
20E-28NF5	bovid	1st Phalanx	pc=1
20E-28NF5	L bovid	1st Phalanx	
20E-28NF5		Tibia	
20E-28NF5	rat/mouse	Mandible	
20E-28NF5	rat/mouse	Mandible	
20E-28NF5		Skull	
20E-28NF5		rib/spine	
20E-28NF5		rib/spine	
20E-28NF5		long bone	
20E-28NF5		Vert	
20E-28NF5		indeterminate	
20E-28NF5		indeterminate	
20E-28NF5		long bone	b=1
20E-28NF5		rib/spine	b=1
20E-28NF5		rib/spine	b=2
20E-28NF5		long bone	c=1
20E-28NL0	sm/bird	long bone	
20E-28NL0		indeterminate	dev=fetal/newborn
20E-28NL0		3rd Phalanx	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NL0	lm							fused	Carpal/tarsal		1	Comple	5
20E-28NL0	lm							fused	Carpal/tarsal		1	1/4 - 1/	3
20E-28NL0	lm							indeterminate	long bone		3	fragme	4
20E-28NL0	lm							indeterminate	rib/spine		4	fragme	2
20E-28NL0	lm							indeterminate	indeterminate		2	fragme	1
20E-28NL0	mm							indeterminate	long bone		11	fragme	5
20E-28NL0	mm							indeterminate	indeterminate		4	fragme	2
20E-28NL0	mm							indeterminate	rib/spine		9	fragme	1
20E-28NL0	unident							indeterminate	indeterminate			fragme	4
20E-28NL1	lm							indeterminate	rib/spine		29	fragme	15
20E-28NL1	lm							indeterminate	long bone		110	fragme	66
20E-28NL1	lm								Molar	Indet.	2	fragme	0
20E-28NL1	lm							indeterminate	indeterminate		15	fragme	13
20E-28NL1	lm							indeterminate	long bone		1	fragme	1
20E-28NL1	mm							indeterminate	skull		4	fragme	1
20E-28NL1	mm							indeterminate	indeterminate		8	fragme	5
20E-28NL1	mm							indeterminate	rib/spine		90	fragme	18
20E-28NL1	mm							indeterminate	long bone		27	fragme	7
20E-28NL1	sm							indeterminate	long bone		4	fragme	0
20E-28NL1	unident							indeterminate	indeterminate			fragme	36
20E-28NL10	lm							indeterminate	long bone		1	fragme	2
20E-28NL10	lm							Unfused	Vert		1	<1/4	1
20E-28NL10	mm							indeterminate	long bone		3	fragme	1
20E-28NL10	mm							fused	Petris Temporal		1	fragme	0
20E-28NL10	Mammalia	Rodentia				rat/mouse		fused	Innominate		1	Comple	0
20E-28NL10	unident							indeterminate	indeterminate			fragme	7
20E-28NL11	Aves					bird			eggshell			fragme	2
20E-28NL11	lm								Horn Core		1	1/4	5
20E-28NL11	Mammalia	Carnivora	Herpestidae	Herpestes	edwardsii	mongoose	Proxim	fused	Femur		1	fragme	1
20E-28NL11	Mammalia	Carnivora	Viverridae			S civet		Fused	Femur		1	Comple	0
20E-28NL11	Mammalia	Rodentia				rat/mouse	Proxim	Fusing	Tibia		1	1/2	0
20E-28NL11	Mammalia	Rodentia				rat/mouse	Proxim	fused	Radius		1	1/2	0
20E-28NL11	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		fused	Radial Carpal		1	Comple	2
20E-28NL11	Reptilia	Testudines				turtle		fused	Carapace		1	1/2 - 3/4	
20E-28NL11	sm/bird					sm/bird		indeterminate	Rib		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL0		Carpal/tarsal	
20E-28NL0		Carpal/tarsal	
20E-28NL0		long bone	c=1
20E-28NL0		rib/spine	b=2
20E-28NL0		indeterminate	
20E-28NL0		long bone	b=2, c=3
20E-28NL0		indeterminate	c=2
20E-28NL0		rib/spine	b=2, c=2
20E-28NL0		indeterminate	b=12, c=11
20E-28NL1		rib/spine	b=3, c=2
20E-28NL1		long bone	b=15, c=14
20E-28NL1		Molar	probably large bovid
20E-28NL1		indeterminate	
20E-28NL1		long bone	w=1, worked indet long bone fragment
20E-28NL1		skull	c=4
20E-28NL1		indeterminate	b=2, c=1
20E-28NL1		rib/spine	b=9, c=5
20E-28NL1		long bone	b=3, c=4
20E-28NL1		long bone	b=1
20E-28NL1		indeterminate	c=20
20E-28NL10		long bone	
20E-28NL10		Vert	
20E-28NL10		long bone	
20E-28NL10		Petris Tempo	b=1
20E-28NL10	rat/mouse	Innominate	
20E-28NL10		indeterminate	
20E-28NL11	bird	eggshell	
20E-28NL11		Horn Core	
20E-28NL11	mongoose	Femur	
20E-28NL11	S civet	Femur	GL 29.1 Bp 6.3 SD 2.9 GLc 27.8 Bd 5.3
20E-28NL11	rat/mouse	Tibia	
20E-28NL11	rat/mouse	Radius	
20E-28NL11	sheep/goat	Radial Carpal	
20E-28NL11	turtle	Carapace	
20E-28NL11	sm/bird	Rib	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NL11	sm/bird					sm/bird		indeterminate	long bone		3	fragme	1
20E-28NL11	lm							indeterminate	rib/spine		11	fragme	58
20E-28NL11	lm							indeterminate	long bone		20	fragme	58
20E-28NL11	lm							indeterminate	Vert		3	fragme	8
20E-28NL11	lm							indeterminate	Skull		4	fragme	9
20E-28NL11	lm							indeterminate	indeterminate		15	fragme	36
20E-28NL11	mm							fused	Sesamoid		2	3/4+	4
20E-28NL11	mm							indeterminate	rib/spine		17	fragme	8
20E-28NL11	mm							indeterminate	long bone		8	fragme	7
20E-28NL11	mm							indeterminate	indeterminate		178	fragme	66
20E-28NL11	unident							indeterminate	indeterminate			fragment	
20E-28NL11	Mammalia								Tooth		3	fragme	4
20E-28NL11	Mammalia	Rodentia				rat/mouse		fused	Maxilla		1	fragme	1
20E-28NL11	lm							indeterminate	long bone		3	fragme	7
20E-28NL11	lm							indeterminate	rib/spine		3	fragme	3
20E-28NL11	mm							indeterminate	long bone		5	fragme	2
20E-28NL11	Mammalia	Artiodactyla	Suidae	Sus		pig			Molar	Upper	1	1/2	2
20E-28NL12	lm						Distal	indeterminate	Femur		1	1/4	36
20E-28NL12	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx		1	Comple	28
20E-28NL12	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus/Capra		zebu/buffalo/goat		fused	frontal w/ horn core		1	1/4	26
20E-28NL12	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus/Capra		zebu/buffalo/goat			Horn Core		1	1/4	
20E-28NL12	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	fused	1st Phalanx		1	1/4	5
20E-28NL12	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	Radial Carpal		1	Comple	2
20E-28NL12	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Fused	Metapodial		1	1/2	3
20E-28NL12	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Fused	Humerus		1	1/4	6
20E-28NL12	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Lower		Premolar		1	fragme	2
20E-28NL12	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	1st Phalanx		1	1/2 - 3/	1
20E-28NL12	lm						Distal	Fused	Metapodial		2	1/4	16
20E-28NL12	lm								Incisor		1	Comple	2
20E-28NL12	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Fused	Scapula		1	1/2	6
20E-28NL12	Mammalia	Rodentia				rat/mouse		fused	Innominate		1	Comple	0
20E-28NL12	Mammalia	Rodentia				rat/mouse	Proxim	fused	Tibia		1	1/2 - 3/	0
20E-28NL12	Mammalia	Carnivora	Mustelidae	Martes	gwatkinsi	Nilgiri Marten		fused	Mandible	Right	1	Comple	2
20E-28NL12	mm						Proxim	Unfused	1st Phalanx		1	fragme	1
20E-28NL12	Reptilia	Testudines	Trionychidae			softshell turtle		fused	Carapace		1	fragme	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL11	sm/bird	long bone	
20E-28NL11		rib/spine	b=3, cut=1
20E-28NL11		long bone	b=3
20E-28NL11		Vert	
20E-28NL11		Skull	
20E-28NL11		indeterminate	b=5
20E-28NL11		Sesamoid	c=1
20E-28NL11		rib/spine	b=3, c-1
20E-28NL11		long bone	b=2
20E-28NL11		indeterminate	b=12, c=1
20E-28NL11		indeterminate	b=3, no weight recorded
20E-28NL11		Tooth	
20E-28NL11	rat/mouse	Maxilla	with 1 molar
20E-28NL11		long bone	b=2
20E-28NL11		rib/spine	b=1
20E-28NL11		long bone	b=2, c=1
20E-28NL11	pig	Molar	
20E-28NL12		Femur	b=1
20E-28NL12	zebu/buffalo	3rd Phalanx	not measured
20E-28NL12	zebu/buffalo/g	frontal w/ horn core	
20E-28NL12	zebu/buffalo/g	Horn Core	no weight recorded
20E-28NL12	sheep/goat/de	1st Phalanx	
20E-28NL12	sheep/goat/de	Radial Carpal	
20E-28NL12	sheep/goat/de	Metapodial	
20E-28NL12	sheep/goat/de	Humerus	
20E-28NL12	sheep/goat/de	Premolar	
20E-28NL12	sheep/goat/de	1st Phalanx	
20E-28NL12		Metapodial	
20E-28NL12		Incisor	
20E-28NL12	sheep/goat	Scapula	
20E-28NL12	rat/mouse	Innominate	
20E-28NL12	rat/mouse	Tibia	
20E-28NL12	Nilgiri Marten	Mandible	M1, P2, P1; about 5 cm long
20E-28NL12		1st Phalanx	
20E-28NL12	softshell turtle	Carapace	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMP	grams
20E-28NL12	lm						Proxim	indeterminate	1st Phalanx		1	1/2	20
20E-28NL12	lm							indeterminate	Patella		1	1/2 - 3/	15
20E-28NL12	lm							indeterminate	Astragalus		1	<1/4	11
20E-28NL12	lm							indeterminate	long bone		53	fragme	268
20E-28NL12	lm							indeterminate	rib/spine		31	fragme	143
20E-28NL12	lm							indeterminate	Vert		11	fragme	68
20E-28NL12	lm							indeterminate	Skull		7	fragme	20
20E-28NL12	lm							indeterminate	indeterminate		90	fragme	237
20E-28NL12	Mammalia								Tooth		4	fragme	5
20E-28NL12	mm							indeterminate	rib/spine		10	fragme	7
20E-28NL12	mm							indeterminate	long bone		61	fragme	44
20E-28NL12	mm							indeterminate	Vert		2	fragme	3
20E-28NL12	mm							indeterminate	indeterminate		94	fragme	121
20E-28NL12	mm							fused	Costal Cartilage		1	fragme	1
20E-28NL12	sm/bird					sm/bird		indeterminate	long bone		7	fragme	2
20E-28NL12	sm/bird					sm/bird		indeterminate	Rib		6	fragme	3
20E-28NL12	sm/bird					sm/bird		indeterminate	Vert		1	fragme	2
20E-28NL12	unident							indeterminate	indeterminate			fragme	3
20E-28NL12	lm							indeterminate	long bone		7	fragme	17
20E-28NL12	lm							indeterminate	Skull		5	fragme	7
20E-28NL12	mm							indeterminate	mandible		2	fragme	2
20E-28NL12	mm							indeterminate	rib/spine		4	fragme	1
20E-28NL12	lm							indeterminate	rib/spine		4	fragme	3
20E-28NL12	lm							indeterminate	rib/spine		1	fragme	0
20E-28NL12	lm/mm							indeterminate	indeterminate		2	fragme	1
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Fusing	Femur	Left	1	1/4	65
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	Calcaneus		1	1/2	28
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	2nd Phalanx		1	1/4	5
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Radial Carpal		1	1/2	10
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Unfused	Tibia		1	1/2	3
20E-28NL13	Mammalia	Carnivora	Canidae			canis sp.		fused	4th tarsal		1	Comple	4
20E-28NL13	Mammalia	Artiodactyla	Suidae	Sus		pig	Lower		Incisor		1	Comple	1
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			Incisor		1	Comple	3
20E-28NL13	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Lower	Unerupted	Premolar		1	Comple	2
20E-28NL13	sm							indeterminate	1st Phalanx		1	Comple	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL12		1st Phalanx	
20E-28NL12		Patella	
20E-28NL12		Astragalus	
20E-28NL12		long bone	b=5
20E-28NL12		rib/spine	b=3
20E-28NL12		Vert	b=2
20E-28NL12		Skull	
20E-28NL12		indeterminate	b=4
20E-28NL12		Tooth	
20E-28NL12		rib/spine	b=3
20E-28NL12		long bone	b=4, c=4
20E-28NL12		Vert	
20E-28NL12		indeterminate	b=9
20E-28NL12		Costal Cartilage	
20E-28NL12	sm/bird	long bone	
20E-28NL12	sm/bird	Rib	
20E-28NL12	sm/bird	Vert	
20E-28NL12		indeterminate	b=2
20E-28NL12		long bone	b=3
20E-28NL12		Skull	
20E-28NL12		mandible	b=2
20E-28NL12		rib/spine	b=4
20E-28NL12		rib/spine	b=2
20E-28NL12		rib/spine	w=1, pol=1
20E-28NL12		indeterminate	b=1
20E-28NL13	zebu/buffalo	Femur	cut=1, mineralized level
20E-28NL13	zebu/buffalo	Calcaneus	mineralized level
20E-28NL13	zebu/buffalo	2nd Phalanx	mineralized level
20E-28NL13	zebu/buffalo	Radial Carpa	mineralized level
20E-28NL13	zebu/buffalo	Tibia	dev=fetal/newborn, mineralized level
20E-28NL13	canis sp.	4th tarsal	mineralized level
20E-28NL13	pig	Incisor	mineralized level
20E-28NL13	zebu	Incisor	mineralized level
20E-28NL13	sheep/goat/de	Premolar	mineralized level
20E-28NL13		1st Phalanx	dev=fetal/newborn, mineralized level

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NL13	mm						Distal	indeterminate	Metapodial		1	1/2	2
20E-28NL13	Mollusca					freshwater shell			shell			fragme	0
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Maxilla	Left	1	fragme	145
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	Tibia		1	1/2	36
20E-28NL13	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		fused	vert, lumbar		1	Comple	2
20E-28NL13	lm							Unfused	Zygomatic	Right	1	fragme	4
20E-28NL13	lm							Unerupted	Premolar		1	fragme	5
20E-28NL13	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer			Incisor		1	Comple	2
20E-28NL13	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	fused	1st Phalanx		1	fragme	1
20E-28NL13	Reptilia	Testudines				turtle		fused	Carapace		2	fragme	2
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	1st Phalanx		1	3/4+	26
20E-28NL13	mm						Proxim	indeterminate	Femur		1	1/2	10
20E-28NL13	lm						Distal	Unfused	Tibia	Left	1	1/2	2
20E-28NL13	lm						Shaft	indeterminate	Tibia		1	1/4 - 1/	48
20E-28NL13	mm							indeterminate	Carpal/tarsal		3	fragme	5
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	2nd Phalanx		1	1/2	9
20E-28NL13	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	fused	1st Phalanx		1	<1/4	2
20E-28NL13	sm							indeterminate	Ilium		1	1/2 - 3/	0
20E-28NL13	sm						Distal	indeterminate	Scapula		1	<1/4	0
20E-28NL13	sm							indeterminate	Skull		3	fragme	2
20E-28NL13	sm						Proxim	Unfused	Tibia		1	1/2	0
20E-28NL13	sm						Shaft	indeterminate	Tibia		1	1/2	0
20E-28NL13	sm						Distal	indeterminate	Radius		1	1/2	0
20E-28NL13	sm							indeterminate	Rib		3	fragme	1
20E-28NL13	Mammalia	Rodentia				rat/mouse			Incisor		1	Comple	0
20E-28NL13	sm							indeterminate	Ilium		1	fragme	1
20E-28NL13	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/deer		fused	Mandibular C	Right	1	1/4	1
20E-28NL13	mm							fused	Costal Cartilage		2	fragme	3
20E-28NL13	mm							indeterminate	Vert		4	fragme	8
20E-28NL13	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	fused	2nd Phalanx		1	<1/4	1
20E-28NL13	mm							fused	Petris Temporal		2	fragme	4
20E-28NL13	mm							indeterminate	Skull		3	fragme	7
20E-28NL13	mm							indeterminate	rib/spine		39	fragme	35
20E-28NL13	mm							indeterminate	long bone		51	fragme	46

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL13		Metapodial	mineralized level
20E-28NL13	freshwater she	shell	mineralized level
20E-28NL13	zebu/buffalo	Maxilla	dev=adult, P3 through M3 (mod-light wear); length of toothrow: 75.1
20E-28NL13	zebu/buffalo	Tibia	mineralized level
20E-28NL13	Indian Hare	vert, lumbar	mineralized level
20E-28NL13		Zygomatic	mineralized level
20E-28NL13		Premolar	mineralized level
20E-28NL13	sheep/goat/de	Incisor	mineralized level
20E-28NL13	sheep/goat/de	1st Phalanx	mineralized level
20E-28NL13	turtle	Carapace	mineralized level
20E-28NL13	zebu/buffalo	1st Phalanx	cg=1, mineralized level
20E-28NL13		Femur	mineralized level
20E-28NL13		Tibia	dev=fetal/newborn, mineralized level
20E-28NL13		Tibia	mineralized level
20E-28NL13		Carpal/tarsal	mineralized level
20E-28NL13	zebu/buffalo	2nd Phalanx	mineralized level
20E-28NL13	sheep/goat/de	1st Phalanx	mineralized level
20E-28NL13		Ilium	mineralized level
20E-28NL13		Scapula	mineralized level
20E-28NL13		Skull	mineralized level
20E-28NL13		Tibia	mineralized level
20E-28NL13		Tibia	mineralized level
20E-28NL13		Radius	mineralized level
20E-28NL13		Rib	mineralized level
20E-28NL13	rat/mouse	Incisor	mineralized level
20E-28NL13		Ilium	articular facet; mineralized level
20E-28NL13	sheep/goat/de	Mandibular C	mineralized level
20E-28NL13		Costal Cartila	mineralized level
20E-28NL13		Vert	mineralized level
20E-28NL13	sheep/goat/de	2nd Phalanx	split lengthwise; mineralized level
20E-28NL13		Petris Tempo	mineralized level
20E-28NL13		Skull	mineralized level
20E-28NL13		rib/spine	b=4, mineralized level
20E-28NL13		long bone	b=6, c=1, mineralized level

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
20E-28NL13	mm							indeterminate	Scapula		1	fragme	3
20E-28NL13	mm							indeterminate	indeterminate		64	fragment	
20E-28NL13	lm							indeterminate	rib/spine		32	fragme	171
20E-28NL13	lm							indeterminate	long bone		53	fragme	282
20E-28NL13	lm						Spine	indeterminate	Scapula		3	fragme	29
20E-28NL13	lm							indeterminate	Skull		3	fragme	109
20E-28NL13	lm							indeterminate	Vert		7	fragme	66
20E-28NL13	lm							fused	Petris Temporal		1	fragme	11
20E-28NL13	Mammalia								Tooth		4	fragme	6
20E-28NL13	lm							indeterminate	indeterminate		88	fragme	291
20E-28NL13	unident							indeterminate	indeterminate			fragme	155
20E-28NL13	lm							indeterminate	Carpal/tarsal		1	fragme	4
20E-28NL13	Mammalia							fused	Costal Cartilage		1	fragme	0
20E-28NL13	lm							indeterminate	long bone		14	fragme	19
20E-28NL13	lm							indeterminate	rib/spine		2	fragme	1
20E-28NL13	lm						blade	indeterminate	scapula		2	fragme	5
20E-28NL13	Mammalia								tooth		1	fragme	0
20E-28NL13	lm/mm							indeterminate	long bone		1	fragme	0
20E-28NL13	lm/mm							indeterminate	indeterminate		1	fragme	1
20E-28NL13	mm							indeterminate	long bone		2	fragme	0
20E-28NL13	mm							indeterminate	rib/spine		3	fragme	1
20E-28NL13	lm/mm							indeterminate	indeterminate		1	fragme	1
20E-28NL14	Aves					bird			Shell			fragme	1
20E-28NL14	Mammalia	Artiodactyla	Bovidae			L bovid	Arch	fused	vert, thoracic		2	fragme	25
20E-28NL14	Mammalia	Artiodactyla	Bovidae			L bovid		fused	Carpal		2	3/4+	15
20E-28NL14	Mammalia	Artiodactyla	Bovidae			L bovid		fused	central tarsal		1	1/2 - 3/	22
20E-28NL14	Mammalia	Artiodactyla	Bovidae			L bovid		fused	tarsal 2/3		1	Comple	9
20E-28NL14	Mammalia	Artiodactyla	Bovidae			bovid		Fused	1st Phalanx		1	Comple	26
20E-28NL14	Mammalia	Artiodactyla	Bovidae			L bovid		fused	Sesamoid		1	Comple	3
20E-28NL14	Mammalia	Artiodactyla	Bovidae			bovid	Upper		Molar		1	Comple	13
20E-28NL14	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		fused	vert, lumbar		1	3/4+	1
20E-28NL14	Mammalia	Rodentia				Rat/Mouse		fused	Mandible	Right	1	fragme	0
20E-28NL14	Mammalia	Rodentia				Rat/Mouse		fused	Innominate	Left	1	fragme	0
20E-28NL14	Mammalia	Rodentia				Rat/Mouse		fused	Femur		2	3/4+	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL13		Scapula	mineralized level
20E-28NL13		indeterminate	b=2, c=1, no weight; mineralized level
20E-28NL13		rib/spine	cut=1, mineralized level
20E-28NL13		long bone	b=1, mineralized level
20E-28NL13		Scapula	cut=2, marks on underside of spine; mineralized level
20E-28NL13		Skull	mineralized level
20E-28NL13		Vert	mineralized level
20E-28NL13		Petris Tempo	mineralized level
20E-28NL13		Tooth	mineralized level
20E-28NL13		indeterminate	b=4, mineralized level
20E-28NL13		indeterminate	b=5, c=1, mineralized level
20E-28NL13		Carpal/tarsal	
20E-28NL13		Costal Cartilage	
20E-28NL13		long bone	b=10, c=2
20E-28NL13		rib/spine	b=2
20E-28NL13		scapula	
20E-28NL13		tooth	
20E-28NL13		long bone	b=1, w=1
20E-28NL13		indeterminate	b=1
20E-28NL13		long bone	b=1
20E-28NL13		rib/spine	b=1
20E-28NL13		indeterminate	
20E-28NL14	bird	Shell	
20E-28NL14	L bovid	vert, thoracic	
20E-28NL14	L bovid	Carpal	
20E-28NL14	L bovid	central tarsal	pc=1
20E-28NL14	L bovid	tarsal 2/3	
20E-28NL14	bovid	1st Phalanx	Bp 33.2 Bd 28.4 GLpe 71.1
20E-28NL14	L bovid	Sesamoid	
20E-28NL14	bovid	Molar	
20E-28NL14	Indian Hare	vert, lumbar	
20E-28NL14	Rat/Mouse	Mandible	
20E-28NL14	Rat/Mouse	Innominate	
20E-28NL14	Rat/Mouse	Femur	one complete: GL 25.9

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NL14	Reptilia	Testudines				turtle		fused	carapace		1	Comple	1
20E-28NL14	Osteichthyes					fish		fused	Vert		1	Comple	0
20E-28NL14	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			Incisor		1	Comple	0
20E-28NL14	Mammalia	Rodentia				rat/mouse		fused	Scapula	Right	1	Comple	0
20E-28NL14	sm/bird					sm/bird		indeterminate	long bone		2	fragme	0
20E-28NL14	lm							indeterminate	Ilium		1	1/4	20
20E-28NL14	lm							indeterminate	rib/spine		8	fragme	56
20E-28NL14	lm							indeterminate	long bone		13	fragme	68
20E-28NL14	lm							indeterminate	Vert		3	fragme	20
20E-28NL14	lm							indeterminate	Skull		3	fragme	31
20E-28NL14	lm							indeterminate	indeterminate		18	fragme	74
20E-28NL14	mm							indeterminate	long bone		21	fragme	20
20E-28NL14	mm							indeterminate	rib/spine		9	fragme	13
20E-28NL14	mm							indeterminate	Vert		2	fragme	36
20E-28NL14	mm							fused	Costal Cartilage		2	fragme	2
20E-28NL14	mm							indeterminate	indeterminate		29	fragme	36
20E-28NL14	Mammalia								Tooth		2	fragme	1
20E-28NL14	unident							indeterminate	indeterminate			fragment	
20E-28NL14	lm/mm						blade	indeterminate	scapula		3	fragme	3
20E-28NL14	lm							indeterminate	long bone		11	fragme	8
20E-28NL14	lm/mm							indeterminate	indeterminate		6	fragme	5
20E-28NL15	Mammalia	Artiodactyla	Bovidae			bovid		Fused	1st Phalanx		1	Comple	34
20E-28NL15	Mammalia	Artiodactyla	Bovidae			bovid		Unerupted	Molar		1	fragme	1
20E-28NL15	Mammalia	Artiodactyla	Bovidae			L bovid		fused	Sesamoid		2	Comple	5
20E-28NL15	lm							indeterminate	rib/spine		2	fragme	35
20E-28NL15	lm							indeterminate	long bone		9	fragme	42
20E-28NL15	lm							indeterminate	Skull		5	fragme	25
20E-28NL15	mm							indeterminate	rib/spine		4	fragme	3
20E-28NL15	mm							fused	Costal Cartilage		1	fragme	3
20E-28NL15	mm							indeterminate	long bone		14	fragme	22
20E-28NL15	mm							indeterminate	indeterminate		12	fragme	9
20E-28NL15	sm						Proxim	indeterminate	Tibia		1	1/2	4
20E-28NL15	unident							indeterminate	indeterminate			fragme	10
20E-28NL15	lm							indeterminate	rib/spine		1	fragme	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL14	turtle	carapace	
20E-28NL14	fish	Vert	b=1, 20 - 30 cm standard length
20E-28NL14	sheep/goat	Incisor	
20E-28NL14	rat/mouse	Scapula	
20E-28NL14	sm/bird	long bone	
20E-28NL14		Ilium	
20E-28NL14		rib/spine	
20E-28NL14		long bone	b=1
20E-28NL14		Vert	
20E-28NL14		Skull	
20E-28NL14		indeterminate	b=4
20E-28NL14		long bone	b=3
20E-28NL14		rib/spine	
20E-28NL14		Vert	
20E-28NL14		Costal Cartilage	
20E-28NL14		indeterminate	b=5
20E-28NL14		Tooth	
20E-28NL14		indeterminate	b=5
20E-28NL14		scapula	
20E-28NL14		long bone	b=6
20E-28NL14		indeterminate	b=3
20E-28NL15	bovid	1st Phalanx	Bp broken Bd 30.8 GLpe 72.8
20E-28NL15	bovid	Molar	
20E-28NL15	L bovid	Sesamoid	
20E-28NL15		rib/spine	
20E-28NL15		long bone	
20E-28NL15		Skull	
20E-28NL15		rib/spine	
20E-28NL15		Costal Cartilage	
20E-28NL15		long bone	
20E-28NL15		indeterminate	b=1
20E-28NL15		Tibia	very mineralized
20E-28NL15		indeterminate	
20E-28NL15		rib/spine	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
20E-28NL15	lm							indeterminate	long bone		4	fragme	7
20E-28NL16	Mammalia	Artiodactyla	Bovidae			bovid		Fused	1st Phalanx		1	Comple	21
20E-28NL16	Mammalia	Artiodactyla	Bovidae			bovid		fused	3rd Phalanx		1	Comple	10
20E-28NL16	lm						Proxim	indeterminate	Calcaneus		1	fragme	7
20E-28NL16	lm						Proxim	indeterminate	Radius		1	fragme	26
20E-28NL16	lm							indeterminate	rib/spine		1	fragme	11
20E-28NL16	lm							indeterminate	Vert		1	fragme	3
20E-28NL16	lm							indeterminate	Maxilla		1	fragme	3
20E-28NL16	lm							indeterminate	long bone		1	fragme	2
20E-28NL16	lm							indeterminate	indeterminate		6	fragme	36
20E-28NL16	mm							indeterminate	long bone		19	fragme	16
20E-28NL16	mm							indeterminate	rib/spine		1	fragme	2
20E-28NL16	mm							indeterminate	indeterminate		8	fragme	6
20E-28NL16	unident							indeterminate	indeterminate			fragme	7
20E-28NL16	lm							indeterminate	long bone		4	fragme	3
20E-28NL16	lm							indeterminate	Skull		5	fragme	3
20E-28NL19	lm							indeterminate	long bone		12	fragme	19
20E-28NL19	lm							indeterminate	rib/spine		3	fragme	3
20E-28NL19	lm							indeterminate	indeterminate		1	fragme	1
20E-28NL19	Mammalia								tooth		1	fragme	2
20E-28NL19	mm							indeterminate	long bone		1	fragme	0
20E-28NL19	unident							indeterminate	indeterminate			fragme	1
20E-28NL2	lm							indeterminate	long bone		17	fragme	19
20E-28NL2	lm							indeterminate	indeterminate		7	fragme	13
20E-28NL2	lm							indeterminate	Skull		3	fragme	4
20E-28NL2	lm							indeterminate	rib/spine		2	fragme	1
20E-28NL2	mm							indeterminate	long bone		225	fragme	108
20E-28NL2	mm							indeterminate	indeterminate		49	fragme	41
20E-28NL2	mm							indeterminate	Skull		4	fragme	4
20E-28NL2	mm							indeterminate	rib/spine		79	fragme	18
20E-28NL2	sm/bird					sm/bird		indeterminate	long bone		17	fragme	4
20E-28NL2	sm/bird					sm/bird		indeterminate	Skull		1	fragme	0
20E-28NL2	Reptilia	Testudines				turtle		Fused	Carapace/Plastron		3	fragme	1
20E-28NL2	unident							indeterminate	indeterminate			fragme	119
20E-28NL20	lm							indeterminate	long bone		3	fragme	8

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL15		long bone	b=3, c=1
20E-28NL16	bovid	1st Phalanx	Bd 24.8 Bp 25.1 GLpe 66.8
20E-28NL16	bovid	3rd Phalanx	DLS 49.9 Ld 43.5 MBS broken
20E-28NL16		Calcaneus	
20E-28NL16		Radius	
20E-28NL16		rib/spine	
20E-28NL16		Vert	
20E-28NL16		Maxilla	b=1
20E-28NL16		long bone	
20E-28NL16		indeterminate	b=1
20E-28NL16		long bone	b=6
20E-28NL16		rib/spine	
20E-28NL16		indeterminate	
20E-28NL16		indeterminate	
20E-28NL16		long bone	b=4
20E-28NL16		Skull	b=3
20E-28NL19		long bone	b=10, c=1
20E-28NL19		rib/spine	b=3
20E-28NL19		indeterminate	c=1
20E-28NL19		tooth	
20E-28NL19		long bone	b=1
20E-28NL19		indeterminate	b=1, c=1
20E-28NL2		long bone	b=2, c=15, level fragmented & burned from field clearing?
20E-28NL2		indeterminate	b=1, c=6, level fragmented & burned from field clearing?
20E-28NL2		Skull	c=3, level fragmented & burned from field clearing?
20E-28NL2		rib/spine	c=2, level fragmented & burned from field clearing?
20E-28NL2		long bone	b=43, c=175, level fragmented & burned from field clearing?
20E-28NL2		indeterminate	b=6, c=42, level fragmented & burned from field clearing?
20E-28NL2		Skull	c=4, level fragmented & burned from field clearing?
20E-28NL2		rib/spine	b=6, c=71, level fragmented & burned from field clearing?
20E-28NL2	sm/bird	long bone	b=1, c=16, level fragmented & burned from field clearing?
20E-28NL2	sm/bird	Skull	c=1, level fragmented & burned from field clearing?
20E-28NL2	turtle	Carapace/Pla	c=3, level fragmented & burned from field clearing?
20E-28NL2		indeterminate	b=105, c=745, level fragmented & burned from field clearing?
20E-28NL20		long bone	b=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
20E-28NL20	lm							indeterminate	rib/spine		1	fragme	1
20E-28NL20	lm						Epiphy	Unfused	Vert		1	fragme	1
20E-28NL20	mm							indeterminate	long bone		1	fragme	0
20E-28NL20	mm							indeterminate	indeterminate		1	fragme	0
20E-28NL20	mm							indeterminate	rib/spine		1	fragme	0
20E-28NL20	Aves					bird		indeterminate	long bone		7	fragme	2
20E-28NL20	lm							indeterminate	Skull		3	fragme	25
20E-28NL20	lm							indeterminate	long bone		10	fragme	55
20E-28NL20	lm							indeterminate	indeterminate		8	fragme	19
20E-28NL20	lm							indeterminate	rib/spine		12	fragme	25
20E-28NL20	lm							Fusing	vert, thoracic		1	1/2 - 3/	17
20E-28NL20	lm							indeterminate	Atlas		1	<1/4	7
20E-28NL20	lm							Fused	vert, caudal		1	1/2 - 3/	2
20E-28NL20	lm						Arch	Indeterminate	vert, thoracic		1	1/4 - 1/	9
20E-28NL20	lm						Arch	indeterminate	vert, cervical		1	<1/4	7
20E-28NL20	lm							Fused	vert, lumbar		1	1/4 - 1/	21
20E-28NL20	lm						Arch	indeterminate	Vert		1	<1/4	3
20E-28NL20	lm								Tooth Root		1	fragme	1
20E-28NL20	lm								Molar		1	fragme	2
20E-28NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	carpal 2/3		1	Comple	11
20E-28NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Distal Sesamoid		1	Comple	2
20E-28NL20	Mammalia							Indeterminate	Skull		1	fragme	10
20E-28NL20	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Unfused	Femur		1	<1/4	9
20E-28NL20	mm							Indeterminate	Skull		6	fragme	13
20E-28NL20	mm							indeterminate	rib/spine		21	fragme	12
20E-28NL20	mm							indeterminate	long bone		20	fragme	20
20E-28NL20	mm							indeterminate	indeterminate		10	fragme	14
20E-28NL20	lm/mm							indeterminate	long bone		1	fragme	5
20E-28NL20	Mammalia	Rodentia				rat/mouse		Fusing	Femur	Left	1	Comple	0
20E-28NL20	Mammalia	Rodentia				rat/mouse	Proxim	Unfused	Tibia	Left	1	1/2 - 3/	0
20E-28NL20	Mammalia	Rodentia				rat/mouse	Distal	Fused	Tibia		1	1/4 - 1/	0
20E-28NL20	Mammalia	Rodentia				rat/mouse	Distal	Fused	Humerus	Left	1	fragme	0
20E-28NL20	Mammalia	Rodentia				rat/mouse		fused	Innominate	Right	1	fragme	0
20E-28NL20	Mammalia	Rodentia				rat/mouse		fused	Metapodial		2	fragme	0
20E-28NL20	sm							indeterminate	Rib		1	<1/4	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL20		rib/spine	b=2
20E-28NL20		Vert	
20E-28NL20		long bone	b=1
20E-28NL20		indeterminate	b=1
20E-28NL20		rib/spine	
20E-28NL20	bird	long bone	
20E-28NL20		Skull	b=1
20E-28NL20		long bone	b=1
20E-28NL20		indeterminate	b=1
20E-28NL20		rib/spine	
20E-28NL20		vert, thoracic	
20E-28NL20		Atlas	
20E-28NL20		vert, caudal	b=1
20E-28NL20		vert, thoracic	
20E-28NL20		vert, cervical	
20E-28NL20		vert, lumbar	
20E-28NL20		Vert	
20E-28NL20		Tooth Root	
20E-28NL20		Molar	
20E-28NL20	zebu/buffalo	carpal 2/3	
20E-28NL20	zebu/buffalo	Distal Sesamoid	
20E-28NL20		Skull	occipital suture?robust w/convoluted interior surface & thick compact bone
20E-28NL20	sheep/goat/de	Femur	
20E-28NL20		Skull	b=1
20E-28NL20		rib/spine	b=3, c=1
20E-28NL20		long bone	b=3
20E-28NL20		indeterminate	b=2
20E-28NL20		long bone	
20E-28NL20	rat/mouse	Femur	
20E-28NL20	rat/mouse	Tibia	
20E-28NL20	rat/mouse	Tibia	
20E-28NL20	rat/mouse	Humerus	
20E-28NL20	rat/mouse	Innominate	
20E-28NL20	rat/mouse	Metapodial	
20E-28NL20		Rib	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NL20	unident							indeterminate	indeterminate			fragme	30
20E-28NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Atlas		3	1/2 - 3/	88
20E-28NL21	lm							Unfused	vert, lumbar		1	1/2	27
20E-28NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	1st Phalanx		1	Comple	23
20E-28NL21	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Proxim	Fused	Femur	Right	1	1/2	10
20E-28NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd Phalanx		1	Comple	14
20E-28NL21	Mammalia	Artiodactyla	Suidae	Sus		pig	Proxim	Unfused	Ulna		1	1/2	2
20E-28NL21	mm							Fused	vert, thoracic		1	1/2 - 3/	7
20E-28NL21	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Head	Fused	Femur		1	3/4+	3
20E-28NL21	mm						Arch	Unfused	vert, thoracic		1	fragme	1
20E-28NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	intermediate carpal		1	Comple	13
20E-28NL21	lm							Fused	Sesamoid		1	Comple	2
20E-28NL21	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Upper		Premolar		1	Comple	1
20E-28NL21	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	Maxilla	Right	1	fragme	2
20E-28NL21	Mammalia	Carnivora				carnivore			Tooth		1	fragme	0
20E-28NL21	Mollusca					shell			shell		1	fragme	0
20E-28NL21	lm							indeterminate	Ilium	Right	1	fragme	49
20E-28NL21	lm							Fused	Costal Cartilage			fragme	5
20E-28NL21	lm						Shaft	indeterminate	Radius		1	1/4	14
20E-28NL21	lm							indeterminate	long bone		3	fragme	16
20E-28NL21	lm							indeterminate	rib/spine		7	fragme	63
20E-28NL21	lm							indeterminate	Skull		3	fragme	18
20E-28NL21	lm							indeterminate	Vert		6	fragme	30
20E-28NL21	lm								Tooth		1	fragme	5
20E-28NL21	lm							indeterminate	indeterminate		7	fragme	21
20E-28NL21	mm						Distal	indeterminate	Humerus		2	1/4 - 1/	15
20E-28NL21	mm							indeterminate	Ilium/Ischium		1	1/4	3
20E-28NL21	mm							indeterminate	long bone		34	fragme	37
20E-28NL21	mm							indeterminate	rib/spine		12	fragme	6
20E-28NL21	mm							indeterminate	Vert		5	fragme	7
20E-28NL21	mm							Fused	Petris Temporal		2	fragme	2
20E-28NL21	mm								Tooth		1	fragme	1
20E-28NL21	mm							indeterminate	indeterminate		12	fragme	15
20E-28NL21	lm							Unfused	Scapula		1	1/2 - 3/	2
20E-28NL21	Reptilia	Testudines				turtle		Fused	Pelvic girdle		1	1/2 - 3/	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL20		indeterminate	b=40
20E-28NL21	zebu/buffalo	Atlas	two different indivs of varying size, and sex?
20E-28NL21		vert, lumbar	
20E-28NL21	zebu/buffalo	1st Phalanx	Bp 25.8 Bd 23.6 GLPe 60.1
20E-28NL21	goat	Femur	Bp 39.8
20E-28NL21	zebu/buffalo	2nd Phalanx	Bp 25.4 Bd 24.2 GL 37.4
20E-28NL21	pig	Ulna	BPC 11.8
20E-28NL21		vert, thoracic	
20E-28NL21	goat	Femur	
20E-28NL21		vert, thoracic	
20E-28NL21	zebu/buffalo	intermediate carpal	
20E-28NL21		Sesamoid	
20E-28NL21	sheep/goat	Premolar	
20E-28NL21	pig	Maxilla	with P3
20E-28NL21	carnivore	Tooth	
20E-28NL21	shell	shell	
20E-28NL21		Ilium	
20E-28NL21		Costal Cartilage	
20E-28NL21		Radius	
20E-28NL21		long bone	
20E-28NL21		rib/spine	
20E-28NL21		Skull	
20E-28NL21		Vert	b=1
20E-28NL21		Tooth	
20E-28NL21		indeterminate	b=1
20E-28NL21		Humerus	
20E-28NL21		Ilium/Ischium	
20E-28NL21		long bone	
20E-28NL21		rib/spine	b=1
20E-28NL21		Vert	
20E-28NL21		Petris Temporal	
20E-28NL21		Tooth	
20E-28NL21		indeterminate	
20E-28NL21		Scapula	dev=fetal/newborn
20E-28NL21	turtle	Pelvic girdle	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NL21	sm						Spine	Fused	vert, lumbar		1	fragme	1
20E-28NL21	sm						Shaft	indeterminate	Tibia		1	1/2 - 3/	0
20E-28NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	tarsal 2/3		1	Comple	7
20E-28NL21	unident							indeterminate	indeterminate			fragme	26
20E-28NL21	lm						proxim	indeterminate	Humerus		1	fragme	1
20E-28NL21	Aves					bird		indeterminate	long bone		1	fragme	0
20E-28NL21	mm							indeterminate	Rib		2	fragme	2
20E-28NL21	lm/mm							indeterminate	indeterminate		1	fragme	0
20E-28NL21	lm							indeterminate	long bone		6	fragme	11
20E-28NL21	lm							indeterminate	rib/spine		2	fragme	2
20E-28NL21	lm							indeterminate	indeterminate		2	fragme	1
20E-28NL21	Mammalia								tooth		1	fragme	0
20E-28NL3	lm							indeterminate	long bone		6	fragme	6
20E-28NL3	lm							Unerupted	Tooth		1	fragme	0
20E-28NL3	mm							indeterminate	long bone		11	fragme	5
20E-28NL3	mm							indeterminate	rib/spine		5	fragme	1
20E-28NL3	mm							indeterminate	indeterminate		12	fragme	5
20E-28NL3	sm/bird					sm/bird		indeterminate	long bone		6	fragme	1
20E-28NL3	unident							indeterminate	indeterminate			fragme	20
20E-28NL4	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	Fused	Radius		1	fragment	
20E-28NL4	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			Molar		1	fragment	
20E-28NL4	mm							Fused	Petris Temporal		1	fragment	
20E-28NL4	Mammalia						Distal	indeterminate	phalanx		1	fragment	
20E-28NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			M3	Right	1	Comple	11
20E-28NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Fused	Radius	Left	1	<1/4	19
20E-28NL4	Mammalia	Artiodactyla	Cervidae			deer sp.		Fused	Petris Temporal		1	Comple	6
20E-28NL4	mm						Proxim	Indeterminate	Humerus		1	fragme	13
20E-28NL4	Mammalia	Artiodactyla	Cervidae			deer sp.			Molar		1	<1/4	0
20E-28NL4	Mammalia						Distal	indeterminate	Phalanx		1	fragme	1
20E-28NL4	lm							indeterminate	Skull		2	fragme	1
20E-28NL4	lm								Molar		1	fragme	0
20E-28NL4	lm							indeterminate	long bone		11	fragme	9
20E-28NL4	lm							indeterminate	indeterminate		8	fragme	16
20E-28NL4	mm							indeterminate	long bone		70	fragme	30

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL21		vert, lumbar	
20E-28NL21		Tibia	
20E-28NL21	zebu/buffalo	tarsal 2/3	
20E-28NL21		indeterminate	b=5
20E-28NL21		Humerus	c=1, dev=fetal/newborn
20E-28NL21	bird	long bone	
20E-28NL21		Rib	
20E-28NL21		indeterminate	pol=1
20E-28NL21		long bone	b=4
20E-28NL21		rib/spine	b=2
20E-28NL21		indeterminate	b=2
20E-28NL21		tooth	
20E-28NL3		long bone	b=2
20E-28NL3		Tooth	b=1
20E-28NL3		long bone	c=5
20E-28NL3		rib/spine	b=5
20E-28NL3		indeterminate	b=1, c=2
20E-28NL3	sm/bird	long bone	b=3, c=2
20E-28NL3		indeterminate	b=63, c=83
20E-28NL4	zebu	Radius	
20E-28NL4	zebu	Molar	
20E-28NL4		Petris Temporal	
20E-28NL4		phalanx	
20E-28NL4	zebu/buffalo	M3	cusps 2&3 mod wear; crown height 19.3 mm
20E-28NL4	zebu/buffalo	Radius	
20E-28NL4	deer sp.	Petris Tempo	size of whitetail deer
20E-28NL4		Humerus	cut=1, cg=1
20E-28NL4	deer sp.	Molar	
20E-28NL4		Phalanx	
20E-28NL4		Skull	b=1
20E-28NL4		Molar	
20E-28NL4		long bone	b=4
20E-28NL4		indeterminate	b=1
20E-28NL4		long bone	b=20

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NL4	mm							indeterminate	indeterminate		38	fragme	28
20E-28NL4	mm							indeterminate	rib/spine		34	fragme	9
20E-28NL4	mm							indeterminate	Skull		2	fragme	1
20E-28NL4	sm/bird					sm/bird		indeterminate	long bone		3	fragme	0
20E-28NL4	unident							indeterminate	indeterminate			fragme	38
20E-28NL5	lm/mm							indeterminate	long bone		1	fragme	1
20E-28NL5	lm								horn core		2	fragme	8
20E-28NL5	Mammalia								antler		3	fragme	2
20E-28NL5	Mammalia	Rodentia				rat/mouse		indeterminate	maxilla		1	fragme	0
20E-28NL5	sm							indeterminate	long bone		7	fragme	2
20E-28NL5	Mammalia								tooth		3	fragme	0
20E-28NL5	lm/mm							indeterminate	vert		1	fragme	3
20E-28NL5	lm/mm							indeterminate	skull		5	fragme	6
20E-28NL5	lm							fused	sesamoid		1	comple	2
20E-28NL5	lm							indeterminate	indeterminate		7	fragme	26
20E-28NL5	lm							indeterminate	long bone		12	fragme	38
20E-28NL5	lm							indeterminate	rib/spine		5	fragme	6
20E-28NL5	mm							indeterminate	long bone		60	fragme	26
20E-28NL5	mm							indeterminate	rib/spine		5	fragme	0
20E-28NL5	mm							indeterminate	indeterminate		17	fragme	11
20E-28NL5	unident							indeterminate	indeterminate			fragme	36
20E-28NL5	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	Fused	Metacarpal		1	<1/4	7
20E-28NL5	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	Fused	Ulna		1	<1/4	9
20E-28NL5	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	Unfused	1st Phalanx		1	<1/4	1
20E-28NL5	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			Molar		3	fragme	2
20E-28NL5	lm							indeterminate	rib/spine		4	fragme	2
20E-28NL5	lm								Tooth		2	fragme	1
20E-28NL5	lm							indeterminate	indeterminate		7	fragme	18
20E-28NL5	lm							indeterminate	long bone		23	fragme	20
20E-28NL5	mm						Distal	indeterminate	Phalanx		1	<1/4	11
20E-28NL5	mm							indeterminate	Skull		5	fragme	2
20E-28NL5	mm							indeterminate	indeterminate		46	fragme	25
20E-28NL5	mm							indeterminate	long bone		120	fragme	47
20E-28NL5	mm							indeterminate	rib/spine		39	fragme	10
20E-28NL5	sm/bird					sm/bird		indeterminate	long bone		21	fragme	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL4		indeterminate	b=9
20E-28NL4		rib/spine	b=5
20E-28NL4		Skull	
20E-28NL4	sm/bird	long bone	b=3
20E-28NL4		indeterminate	b=37, c=11
20E-28NL5		long bone	pc=1, w=1
20E-28NL5		horn core	pc=1
20E-28NL5		antler	
20E-28NL5	rat/mouse	maxilla	
20E-28NL5		long bone	
20E-28NL5		tooth	
20E-28NL5		vert	
20E-28NL5		skull	c=2
20E-28NL5		sesamoid	
20E-28NL5		indeterminate	b=1
20E-28NL5		long bone	b=2, c=1
20E-28NL5		rib/spine	b=1
20E-28NL5		long bone	b=8, c=9
20E-28NL5		rib/spine	b=4
20E-28NL5		indeterminate	c=1
20E-28NL5		indeterminate	
20E-28NL5	zebu	Metacarpal	b=1
20E-28NL5	zebu	Ulna	b=1
20E-28NL5	zebu	1st Phalanx	dev=fetal/newborn
20E-28NL5	zebu	Molar	
20E-28NL5		rib/spine	b=1
20E-28NL5		Tooth	
20E-28NL5		indeterminate	b=3
20E-28NL5		long bone	b=8
20E-28NL5		Phalanx	
20E-28NL5		Skull	b=1
20E-28NL5		indeterminate	b=9, c=1
20E-28NL5		long bone	b=32, c=2
20E-28NL5		rib/spine	b=7, c=2
20E-28NL5	sm/bird	long bone	b=13, c=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NL5	sm/bird					sm/bird			Tooth Root		1	fragme	0
20E-28NL5	unident							indeterminate	indeterminate			fragme	41
20E-28NL6	lm								tooth		4	fragme	1
20E-28NL6	lm							indeterminate	long bone		39	fragme	26
20E-28NL6	lm							indeterminate	long bone		1	fragme	7
20E-28NL6	lm							Unfused	Vert		1	fragme	1
20E-28NL6	lm							indeterminate	rib/spine		26	fragme	10
20E-28NL6	lm							indeterminate	indeterminate		8	fragme	8
20E-28NL6	mm							indeterminate	rib/spine		43	fragme	8
20E-28NL6	mm							indeterminate	long bone		42	fragme	9
20E-28NL6	mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Indeterminate	1st Phalanx		1	1/4 - 1/	1
20E-28NL6	mm							indeterminate	skull		5	fragme	2
20E-28NL6	mm							indeterminate	indeterminate		22	fragme	8
20E-28NL6	Mammalia	Rodentia				rat/mouse	Distal	Fused	Tibia		1	1/4 - 1/	0
20E-28NL6	sm							indeterminate	long bone		2	fragme	0
20E-28NL6	Osteichthyes					fish		Fused	ceratohyal		2	fragme	1
20E-28NL6	lm							indeterminate	Astragalus		1	<1/4	8
20E-28NL6	lm						Proxim	indeterminate	2nd Phalanx		1	<1/4	3
20E-28NL6	lm							indeterminate	Carpal/tarsal		1	1/2	1
20E-28NL6	Reptilia	Testudines				turtle		Fused	Phalanx or metapodia		1	fragme	0
20E-28NL6	unident							Indeterminate	indeterminate			fragme	25
20E-28NL6	Aves					M bird		Indeterminate	long bone		2	fragme	0
20E-28NL7	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Indeterminate	Metapodial		1	fragme	2
20E-28NL7	lm							Indeterminate	long bone		9	fragme	13
20E-28NL7	lm							indeterminate	rib/spine		9	fragme	4
20E-28NL7	lm							indeterminate	indeterminate		2	fragme	2
20E-28NL7	lm								Tooth		1	fragme	0
20E-28NL7	mm							indeterminate	rib/spine		27	fragme	4
20E-28NL7	mm								Tooth		1	fragme	0
20E-28NL7	mm							indeterminate	indeterminate		21	fragme	8
20E-28NL7	mm							indeterminate	long bone		23	fragme	7
20E-28NL7	sm/bird					sm/bird		indeterminate	long bone		6	fragme	1
20E-28NL7	Reptilia	Testudines				turtle		Fused	Carapace/Plastron		2	fragme	0
20E-28NL7	unident							indeterminate	indeterminate			fragme	9
20E-28NL8	sm					mongoose si	Proxim	Unfused	Ulna	Right	1	1/4	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL5	sm/bird	Tooth Root	c=1
20E-28NL5		indeterminate	b=63, c=10
20E-28NL6		tooth	b=1
20E-28NL6		long bone	b=1, c=6
20E-28NL6		long bone	rg=1
20E-28NL6		Vert	
20E-28NL6		rib/spine	c=10
20E-28NL6		indeterminate	b=2
20E-28NL6		rib/spine	b=4, c=1
20E-28NL6		long bone	b=10, c=3
20E-28NL6	goat	1st Phalanx	
20E-28NL6		skull	b=2
20E-28NL6		indeterminate	b=6
20E-28NL6	rat/mouse	Tibia	
20E-28NL6		long bone	
20E-28NL6	fish	ceratohyal	
20E-28NL6		Astragalus	
20E-28NL6		2nd Phalanx	
20E-28NL6		Carpal/tarsal	
20E-28NL6	turtle	Phalanx or metapodial	
20E-28NL6		indeterminate	b=23, c=5
20E-28NL6	M bird	long bone	
20E-28NL7	sheep/goat/de	Metapodial	too mineralized to ID to species
20E-28NL7		long bone	b=5
20E-28NL7		rib/spine	b=7, c=1
20E-28NL7		indeterminate	
20E-28NL7		Tooth	b=1
20E-28NL7		rib/spine	b=8, c=3
20E-28NL7		Tooth	
20E-28NL7		indeterminate	b=2
20E-28NL7		long bone	b=5
20E-28NL7	sm/bird	long bone	b=3
20E-28NL7	turtle	Carapace/Pla	c=1
20E-28NL7		indeterminate	b=13, c=4
20E-28NL8	mongoose size	Ulna	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NL8	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			P3	Right	1	Comple	2
20E-28NL8	Reptilia	Squamata				snake		Fused	Vert		1	3/4+	1
20E-28NL8	sm							indeterminate	vert, caudal		1	fragme	0
20E-28NL8	lm							indeterminate	Scapula		1	fragme	16
20E-28NL8	Mammalia	Artiodactyla	Suidae	Sus		pig	Proxim	Fused	Calcaneus	Left	1	1/4 - 1/	8
20E-28NL8	lm						Proxim	Indeterminate	Femur		1	<1/4	6
20E-28NL8	lm							indeterminate	accessory carpal		1	<1/4	3
20E-28NL8	Mammalia	Artiodactyla	Suidae	Sus		pig			Tooth		1	<1/4	2
20E-28NL8	lm								Tooth		1	fragme	1
20E-28NL8	lm							indeterminate	Skull		4	fragme	5
20E-28NL8	lm							indeterminate	rib/spine		16	fragme	8
20E-28NL8	lm							indeterminate	indeterminate		6	fragme	16
20E-28NL8	lm							indeterminate	long bone		16	fragme	35
20E-28NL8	lm							indeterminate	long bone		23	fragme	14
20E-28NL8	mm							indeterminate	rib/spine		20	fragme	7
20E-28NL8	mm							indeterminate	indeterminate		33	fragme	21
20E-28NL8	mm												
20E-28NL8	Reptilia	Testudines				turtle		Fused	Carapace/Plastron		4	Comple	2
20E-28NL8	sm/bird					sm/bird		indeterminate	long bone		15	fragme	5
20E-28NL8	unident							indeterminate	indeterminate			fragme	15
20E-28NL8	mm							indeterminate	rib/spine		2	fragme	1
20E-28NL8	Mammalia								Tooth		1	fragme	1
20E-28NL8	lm							indeterminate	long bone		13	fragme	17
20E-28NL8	lm							indeterminate	rib/spine		2	fragme	2
20E-28NL8	Mammalia							indeterminate	Mandible		1	fragme	2
20E-28NL8	Mammalia							indeterminate	Skull		2	fragme	1
20E-28NL8	unident							Indeterminate	indeterminate			fragme	0
20E-28NL9	Aves					bird		indeterminate	Scapula		1	fragme	1
20E-28NL9	Aves					bird		indeterminate	long bone		24	fragme	9
20E-28NL9	lm							indeterminate	Basioccipital		1	1/4	10
20E-28NL9	lm						Upper		Molar		1	1/2	7
20E-28NL9	lm							fused	Petris Temporal		1	fragme	15
20E-28NL9	Mammalia	Artiodactyla	Suidae	Sus		pig		Unerupted	Molar		1	Comple	1
20E-28NL9	Mammalia	Artiodactyla	Suidae	Sus		pig		Unfused	2nd metapodial		1	Comple	5
20E-28NL9	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		fused	2nd Phalanx		1	Comple	2
20E-28NL9	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx		1	<1/4	3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL8	zebu/buffalo	P3	dev=old adult, heavily worn
20E-28NL8	snake	Vert	smooth ventral keel; mineralized
20E-28NL8		vert, caudal	
20E-28NL8		Scapula	
20E-28NL8	pig	Calcaneus	
20E-28NL8		Femur	
20E-28NL8		accessory ca	b=1
20E-28NL8	pig	Tooth	
20E-28NL8		Tooth	
20E-28NL8		Skull	
20E-28NL8		rib/spine	b=5
20E-28NL8		indeterminate	b=1
20E-28NL8		long bone	b=8, c=1
20E-28NL8		long bone	b=9
20E-28NL8		rib/spine	b=7
20E-28NL8		indeterminate	b=11
20E-28NL8	turtle	Carapace/Pla	b=3
20E-28NL8	sm/bird	long bone	b=4
20E-28NL8		indeterminate	b=8, c=4
20E-28NL8		rib/spine	b=1
20E-28NL8		Tooth	
20E-28NL8		long bone	b=13
20E-28NL8		rib/spine	
20E-28NL8		Mandible	
20E-28NL8		Skull	c=1
20E-28NL8		indeterminate	
20E-28NL9	bird	Scapula	
20E-28NL9	bird	long bone	b=8
20E-28NL9		Basioccipital	mineralized level
20E-28NL9		Molar	dev=old adult, very worn; mineralized level
20E-28NL9		Petris Tempo	mineralized level
20E-28NL9	pig	Molar	mineralized level
20E-28NL9	pig	2nd metapod	mineralized level
20E-28NL9	sheep/goat	2nd Phalanx	Bp 9.0 Bd 8.4 GL 22.6; mineralized level
20E-28NL9	zebu/buffalo	3rd Phalanx	mineralized level

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
20E-28NL9	sm						Proxim	Indeterminate	Radius		1	1/2	0
20E-28NL9	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	fused	Tibia		1	<1/4	3
20E-28NL9	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	carpal 2/3	Left	1	Comple	18
20E-28NL9	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	Radial Carpa	Left	1	Comple	12
20E-28NL9	lm							indeterminate	Mandible		1	<1/4	9
20E-28NL9	Mammalia	Artiodactyla	Cervidae			deer sp.			Antler		1	fragme	3
20E-28NL9	lm						Proxim	Fused	1st Phalanx		1	<1/4	2
20E-28NL9	lm						Distal	Indeterminate	Metapodial		1	<1/4	2
20E-28NL9	mm						Proxim	Indeterminate	3rd and 4th Metapodi		1	<1/4	1
20E-28NL9	mm								Incisor		2	fragme	0
20E-28NL9	lm							indeterminate	Vert		1	1/4	6
20E-28NL9	lm							indeterminate	rib/spine		15	fragme	63
20E-28NL9	lm							indeterminate	Vert		5	fragme	12
20E-28NL9	lm							indeterminate	indeterminate		18	fragme	61
20E-28NL9	lm							indeterminate	long bone		17	fragme	49
20E-28NL9	lm								Tooth		7	fragme	2
20E-28NL9	mm							indeterminate	Carpal/tarsal		1	fragme	1
20E-28NL9	mm							indeterminate	Vert		7	fragme	11
20E-28NL9	mm							indeterminate	Skull		1	fragme	2
20E-28NL9	mm							Indeterminate	long bone		50	fragme	36
20E-28NL9	mm							Indeterminate	rib/spine		62	fragme	26
20E-28NL9	mm							indeterminate	indeterminate		73	fragme	66
20E-28NL9	unident							indeterminate	indeterminate			fragme	61
20E-28NL9	sm							indeterminate	Scapula		1	fragme	1
20E-28NL9	sm							indeterminate	Metapodial		3	fragme	1
20E-28NL9	sm							indeterminate	Rib		3	fragme	1
20E-28NL9	sm							indeterminate	Costal Cartilage		1	fragme	0
20E-28NL9	sm							indeterminate	Mandible		1	fragme	0
20E-28NL9	sm							indeterminate	Skull		1	fragme	1
20E-28NL9	Osteichthyes					fish		indeterminate	Skull		2	fragme	1
20E-28NL9	sm							indeterminate	long bone		15	fragme	6
20E-28NL9	sm							indeterminate	indeterminate		9	fragme	2
21E-28NL1(L22)	Aves					bird			Shell			fragme	2
21E-28NL1(L22)	Aves					bird			Shell			fragme	0
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			bovid		Fused	1st Phalanx	R	7	Comple	155

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
20E-28NL9		Radius	mineralized level
20E-28NL9	sheep/goat	Tibia	mineralized level
20E-28NL9	zebu	carpal 2/3	mineralized level
20E-28NL9	zebu	Radial Carpa	mineralized level
20E-28NL9		Mandible	mineralized level
20E-28NL9	deer sp.	Antler	mineralized level
20E-28NL9		1st Phalanx	mineralized level
20E-28NL9		Metapodial	mineralized level
20E-28NL9		3rd and 4th M	mineralized level
20E-28NL9		Incisor	mineralized level
20E-28NL9		Vert	dev=old adult, arthritic vertebral centrum; mineralized level
20E-28NL9		rib/spine	mineralized level
20E-28NL9		Vert	mineralized level
20E-28NL9		indeterminate	b=2, mineralized level
20E-28NL9		long bone	b=5, mineralized level
20E-28NL9		Tooth	mineralized level
20E-28NL9		Carpal/tarsal	mineralized level
20E-28NL9		Vert	mineralized level
20E-28NL9		Skull	mineralized level
20E-28NL9		long bone	b=8, mineralized level
20E-28NL9		rib/spine	b=20, mineralized level
20E-28NL9		indeterminate	b=20, mineralized level
20E-28NL9		indeterminate	# burned specimens not noted; mineralized level
20E-28NL9		Scapula	
20E-28NL9		Metapodial	
20E-28NL9		Rib	
20E-28NL9		Costal Cartilage	
20E-28NL9		Mandible	
20E-28NL9		Skull	
20E-28NL9	fish	Skull	
20E-28NL9		long bone	b=3
20E-28NL9		indeterminate	b=5
21E-28NL1	bird	Shell	
21E-28NL1	bird	Shell	1. Bp 30.9 Bd 28.7 GLpe 69.1 2. Bp 26.9 Bd 26.6 GLpe 61.1 3. Bp 26.3 Bd 25.7 GLpe 63.4 (for 1st phal below)
21E-28NL1	bovid	1st Phalanx	4. Bd 24.4 5. Bp 27.6 Bd 26.0 GLpe 61.2 6. Bp 32.2 Bd 30.5 GLpe 77.5 7. Bp 22.2 Bd 21.6 GLpe 66.4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			bovid		Fused	1st Phalanx	Left	1	Comple	22
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			bovid		Fused	2nd Phalanx	Right	3	Comple	46
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			bovid		Fused	2nd Phalanx	Left	1	Comple	15
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			bovid		fused	3rd Phalanx	Right	2	Comple	23
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			bovid		fused	3rd carpal		1	Comple	16
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			bovid		fused	4th Carpal		1	Comple	16
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			L bovid	Proxim	Fused	Tibia		1	1/2	35
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			bovid	Proxim	Fused	Axis		1	1/4	17
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			bovid	Distal	Unfused	Tibia		1	<1/4	3
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			L bovid		fused	vert, cervical		1	fragme	19
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae			L bovid	Arch	fused	Vert		2	fragme	24
21E-28NL1(L22)	Mammalia	Artiodactyla	Suidae	Sus		pig		Fusing	vert, lumbar		1	1/2	15
21E-28NL1(L22)	mm						Shaft	Unfused	Tibia	Right	1	fragme	6
21E-28NL1(L22)	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	Femur		1	fragme	18
21E-28NL1(L22)	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		Unfused	vert, cervical		1	fragme	7
21E-28NL1(L22)	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	3rd carpal		1	Comple	2
21E-28NL1(L22)	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Shaft	fused	1st Phalanx		1	1/2	1
21E-28NL1(L22)	Reptilia	Squamata				snake		fused	Vert		2	Comple	3
21E-28NL1(L22)	mm						Proxim	indeterminate	Scapula		1	fragme	1
21E-28NL1(L22)	mm							indeterminate	long bone		1	fragme	1
21E-28NL1(L22)	mm							indeterminate	Rib		1	fragme	1
21E-28NL1(L22)	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		fused	Innominate	Left	1	fragme	1
21E-28NL1(L22)	Mammalia	Rodentia				rat/mouse		fused	Humerus		1	Comple	0
21E-28NL1(L22)	Mammalia	Rodentia				Rat/Mouse		fused	Mandible	Left	2	fragme	0
21E-28NL1(L22)	Mammalia	Rodentia				Rat/Mouse		fused	Mandible	Right	2	fragme	0
21E-28NL1(L22)	Mammalia	Rodentia				Rat/Mouse		fused	Innominate	Right	1	fragme	0
21E-28NL1(L22)	Mammalia	Rodentia				Rat/Mouse		fused	Femur		4	fragme	1
21E-28NL1(L22)	Mammalia	Rodentia				Rat/Mouse		fused	Tibia		2	fragme	0
21E-28NL1(L22)	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	fused	Phalanx		1	1/4	3
21E-28NL1(L22)	lm							Indeterminate	rib/spine		27	fragme	136
21E-28NL1(L22)	lm							Indeterminate	long bone		25	fragme	154
21E-28NL1(L22)	lm							Indeterminate	Skull		6	fragme	22
21E-28NL1(L22)	lm							Indeterminate	Vert		11	fragme	41
21E-28NL1(L22)	lm							Indeterminate	indeterminate		46	fragme	108

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
21E-28NL1	bovid	1st Phalanx	Articulates with P2 from this level. Bp 26.9 Bd 25.4 GLpe 58.2
21E-28NL1	bovid	2nd Phalanx	Articulate with P1s in this level: 1. Bp 31.7 Bd 26.4 GL 48.6 2. Bp 26.3 Bd 23.6 GL 40.7 3. Bp 27.9 Bd 24.6 GL 41.8
21E-28NL1	bovid	2nd Phalanx	articulates with P1 in this level: Bp 26.5 Bd 24.3 GL 40.7
21E-28NL1	bovid	3rd Phalanx	1. DLS 63.9 Ld broken MBS 25 2. DLS 47.2 Ld 40.3 MBS 12.2
21E-28NL1	bovid	3rd carpal	
21E-28NL1	bovid	4th Carpal	
21E-28NL1	L bovid	Tibia	hack=1
21E-28NL1	bovid	Axis	
21E-28NL1	bovid	Tibia	
21E-28NL1	L bovid	vert, cervical	
21E-28NL1	L bovid	Vert	
21E-28NL1	pig	vert, lumbar	
21E-28NL1		Tibia	dev=fetal/newborn
21E-28NL1	goat	Femur	Bd 36.8
21E-28NL1	sheep/goat/de	vert, cervical	
21E-28NL1	sheep/goat/de	3rd carpal	
21E-28NL1	sheep/goat/de	1st Phalanx	
21E-28NL1	snake	Vert	
21E-28NL1		Scapula	dev=fetal/newborn
21E-28NL1		long bone	dev=fetal/newborn
21E-28NL1		Rib	dev=fetal/newborn
21E-28NL1	Indian Hare	Innominate	
21E-28NL1	rat/mouse	Humerus	
21E-28NL1	Rat/Mouse	Mandible	
21E-28NL1	Rat/Mouse	Mandible	
21E-28NL1	Rat/Mouse	Innominate	
21E-28NL1	Rat/Mouse	Femur	
21E-28NL1	Rat/Mouse	Tibia	
21E-28NL1	sheep/goat/de	Phalanx	
21E-28NL1		rib/spine	b=2
21E-28NL1		long bone	b=4
21E-28NL1		Skull	
21E-28NL1		Vert	
21E-28NL1		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
21E-28NL1(L22)	mm							Indeterminate	rib/spine		55	fragme	36
21E-28NL1(L22)	mm							indeterminate	long bone		58	fragme	42
21E-28NL1(L22)	mm							fused	Costal Cartilage			fragme	3
21E-28NL1(L22)	mm							Unfused	Ilium		1	fragme	1
21E-28NL1(L22)	mm							indeterminate	indeterminate		71	fragme	54
21E-28NL1(L22)	unident							indeterminate	indeterminate			fragme	64
21E-28NL1(L22)	Mammalia	Rodentia				rat/mouse		fused	Mandible	Left	1	fragme	0
21E-28NL1(L22)	Mammalia	Rodentia				rat/mouse		fused	Mandible	Right	1	fragme	0
21E-28NL1(L22)	sm/bird					sm/bird		indeterminate	long bone		10	fragme	2
21E-28NL1(L22)	sm						Distal	indeterminate	Tibia		1	3/4+	0
21E-28NL1(L22)	sm							indeterminate	Innominate		1	fragme	0
21E-28NL2 (L23)	Aves					S bird	Proxim	indeterminate	Humerus		1	fragme	0
21E-28NL2 (L23)	Aves					L bird	Shaft	indeterminate	Scapula		1	<1/4	1
21E-28NL2 (L23)	lm							indeterminate	long bone		3	fragme	30
21E-28NL2 (L23)	lm						Proxim	indeterminate	Rib		2	<1/4	9
21E-28NL2 (L23)	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	Indeterminate	Femur		1	<1/4	11
21E-28NL2 (L23)	lm							indeterminate	rib/spine		4	fragme	22
21E-28NL2 (L23)	mm							indeterminate	Radial carpal		1	3/4+	4
21E-28NL2 (L23)	lm							Unfused	Vert		1	1/4 - 1/	14
21E-28NL2 (L23)	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Indeterminate	Tibia		1	<1/4	2
21E-28NL2 (L23)	lm						Arch	indeterminate	Vert		1	fragme	5
21E-28NL2 (L23)	Reptilia	Testudines	Trionychidae			softshell turtle		fused	Carapace/Plastron		1	fragme	1
21E-28NL2 (L23)	sm							indeterminate	Skull		1	fragme	3
21E-28NL2 (L23)	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Upper		Premolar		1	Comple	4
21E-28NL2 (L23)	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	Scapula	Left	1	1/4	37
21E-28NL2 (L23)	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	2nd Phalanx	Left	4	Comple	52
21E-28NL2 (L23)	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	Astragalus	Right	1	3/4+	43
21E-28NL2 (L23)	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	3rd Phalanx		1	3/4+	10
21E-28NL2 (L23)	lm							Unfused	Vert		1	<1/4	2
21E-28NL2 (L23)	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Shaft	fused	Radius	Left	1	1/4	7
21E-28NL2 (L23)	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Upper		Premolar		1	Comple	2
21E-28NL2 (L23)	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		Fusing length	Metapodial		1	fragme	1
21E-28NL2 (L23)	Mammalia	Artiodactyla	Suidae	Sus		pig			Incisor		1	fragme	0
21E-28NL2 (L23)	lm							indeterminate	Patella		1	fragme	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
21E-28NL1		rib/spine	b=12
21E-28NL1		long bone	b=2
21E-28NL1		Costal Cartilage	
21E-28NL1		Ilium	dev=fetal/newborn
21E-28NL1		indeterminate	
21E-28NL1		indeterminate	
21E-28NL1	rat/mouse	Mandible	
21E-28NL1	rat/mouse	Mandible	
21E-28NL1	sm/bird	long bone	
21E-28NL1		Tibia	
21E-28NL1		Innominate	
21E-28NL2	S bird	Humerus	
21E-28NL2	L bird	Scapula	
21E-28NL2		long bone	
21E-28NL2		Rib	
21E-28NL2	zebu	Femur	b=1
21E-28NL2		rib/spine	
21E-28NL2		Radial carpal	b=1
21E-28NL2		Vert	
21E-28NL2	sheep/goat	Tibia	b=1
21E-28NL2		Vert	
21E-28NL2	softshell turtle	Carapace/Plastron	
21E-28NL2		Skull	
21E-28NL2	zebu	Premolar	
21E-28NL2	zebu	Scapula	
21E-28NL2	zebu	2nd Phalanx	1. Bp 25.8 Bd 22.5 GL 41.5 2. Bp 25.9 Bd 21.1 GL 43.3 3. Bp 27.8 Bd 25.0 GL 43.4 4. Bp 25.1 Bd 22.2 GL 42.4
21E-28NL2	zebu	Astragalus	Bd 47.1
21E-28NL2	zebu	3rd Phalanx	
21E-28NL2		Vert	
21E-28NL2	sheep/goat/de	Radius	
21E-28NL2	sheep/goat	Premolar	
21E-28NL2	sheep/goat	Metapodial	dev=fetal/newborn
21E-28NL2	pig	Incisor	
21E-28NL2		Patella	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
21E-28NL2 (L23)	Mammalia	Rodentia				rat/mouse		fused	Tibia	Left	2	Comple	0
21E-28NL2 (L23)	Mammalia	Rodentia				rat/mouse	Distal	fused	Humerus		1	fragme	0
21E-28NL2 (L23)	Mammalia	Rodentia				rat/mouse		fused	Femur		1	Comple	0
21E-28NL2 (L23)	Osteichthyes					fish		Indeterminate	Skull		1	fragme	0
21E-28NL2 (L23)	lm							Indeterminate	Skull		4	fragme	7
21E-28NL2 (L23)	lm							Indeterminate	long bone		1	fragme	3
21E-28NL2 (L23)	lm							Indeterminate	rib/spine		10	fragme	7
21E-28NL2 (L23)	lm							Indeterminate	indeterminate		8	fragme	9
21E-28NL2 (L23)	mm						Arch	Indeterminate	Vert		1	fragme	3
21E-28NL2 (L23)	sm					.		Indeterminate	long bone		4	fragme	2
21E-28NL2 (L23)	sm							Indeterminate	Rib		2	fragme	0
21E-28NL2 (L23)	sm							Indeterminate	Skull		3	fragme	1
21E-28NL2 (L23)	unident							Indeterminate	indeterminate			fragme	6
22E-26NF11spotpitflot	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	3
22E-26NF11spotpitflot	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		unerupted	molar		1	comple	2
22E-26NF11spotpitflot	Mammalia	Artiodactyla				L ruminant			incisor		1	fragme	2
22E-26NF11spotpitflot	lm/mm							indeterminate	hyoid		1	1/2	1
22E-26NF11spotpitflot	Mammalia								antler		1	fragme	1
22E-26NF11spotpitflot	mm/sm							indeterminate	vert, caudal		1	fragme	0
22E-26NF11spotpitflot	sm							indeterminate	long bone		3	fragme	0
22E-26NF11spotpitflot	lm							indeterminate	long bone		2	fragme	2
22E-26NF11spotpitflot	mm							indeterminate	long bone		12	fragme	4
22E-26NF11spotpitflot	mm							indeterminate	rib/spine		2	fragme	0
22E-26NF11spotpitflot	mm							indeterminate	indeterminate		7	fragme	2
22E-26NF11spotpitflot	unident							indeterminate	indeterminate			fragme	3
22E-26NF14L1	Mammalia	Artiodactyla				L artiodactyl	shaft	fused	metapodial		1	<1/4	1
22E-26NF14L1	Mammalia								tooth		3	fragme	1
22E-26NF14L1	Aves					bird		indeterminate	long bone		1	fragme	1
22E-26NF14L1	lm/mm							indeterminate	vert		7	fragme	19
22E-26NF14L1	lm							indeterminate	skull		3	fragme	8
22E-26NF14L1	lm/mm							indeterminate	scapula		1	<1/4	6
22E-26NF14L1	lm							indeterminate	long bone		2	fragme	5
22E-26NF14L1	lm							indeterminate	rib/spine		4	fragme	2
22E-26NF14L1	mm							indeterminate	rib		1	fragme	1
22E-26NF14L1	lm							indeterminate	indeterminate		4	fragme	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
21E-28NL2	rat/mouse	Tibia	
21E-28NL2	rat/mouse	Humerus	
21E-28NL2	rat/mouse	Femur	
21E-28NL2	fish	Skull	
21E-28NL2		Skull	
21E-28NL2		long bone	
21E-28NL2		rib/spine	
21E-28NL2		indeterminate	
21E-28NL2		Vert	
21E-28NL2		long bone	
21E-28NL2		Rib	
21E-28NL2		Skull	
21E-28NL2		indeterminate	
22E-26NF11spotpitflot	softshell turtle	carapace	
22E-26NF11spotpitflot	sheep/goat/de	molar	
22E-26NF11spotpitflot	L ruminant	incisor	
22E-26NF11spotpitflot		hyoid	
22E-26NF11spotpitflot		antler	
22E-26NF11spotpitflot		vert, caudal	
22E-26NF11spotpitflot		long bone	b=1
22E-26NF11spotpitflot		long bone	b=1
22E-26NF11spotpitflot		long bone	b=3
22E-26NF11spotpitflot		rib/spine	b=1
22E-26NF11spotpitflot		indeterminate	b=2
22E-26NF11spotpitflot		indeterminate	
22E-26NF14L1	L artiodactyl	metapodial	
22E-26NF14L1		tooth	
22E-26NF14L1	bird	long bone	
22E-26NF14L1		vert	
22E-26NF14L1		skull	
22E-26NF14L1		scapula	
22E-26NF14L1		long bone	
22E-26NF14L1		rib/spine	b=1
22E-26NF14L1		rib	
22E-26NF14L1		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
22E-26NF14L1	mm							indeterminate	long bone		24	fragme	9
22E-26NF14L1	mm							indeterminate	rib/spine		8	fragme	2
22E-26NF14L1	mm							indeterminate	indeterminate		3	fragme	1
22E-26NF14L1	unident							indeterminate	indeterminate			fragme	8
22E-26NF14L2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx		1	1/2	8
22E-26NF14L2	unident							indeterminate	indeterminate			fragme	2
22E-26NF14L2	Mammalia								antler		1	fragme	0
22E-26NF14L2	sm							indeterminate	femur		1	comple	0
22E-26NF14L2	sm							indeterminate	vert		2	fragme	0
22E-26NF14L2	lm							indeterminate	indeterminate		7	fragme	30
22E-26NF14L2	lm							indeterminate	rib/spine		2	fragme	6
22E-26NF14L2	lm							indeterminate	rib		1	fragme	4
22E-26NF14L2	mm							indeterminate	long bone		26	fragme	9
22E-26NF14L2	mm							indeterminate	rib/spine		5	fragme	4
22E-26NF14L2	mm							indeterminate	indeterminate		3	fragme	4
22E-26NF14L2	Mammalia								antler		1	fragme	1
22E-26NF14L2	lm							indeterminate	long bone		3	fragme	4
22E-26NF14L2	mm							indeterminate	long bone		4	fragme	0
22E-26NF14L2flot	Mammalia								antler		2	fragme	1
22E-26NF14L2flot	lm/mm							indeterminate	skull		1	fragme	0
22E-26NF14L2flot	lm							indeterminate	long bone		7	fragme	6
22E-26NF14L2flot	lm							indeterminate	rib/spine		1	fragme	1
22E-26NF14L2flot	lm							indeterminate	indeterminate		5	fragme	5
22E-26NF14L2flot	mm							indeterminate	long bone		9	fragme	2
22E-26NF14L2flot	mm							indeterminate	rib/spine		6	fragme	0
22E-26NF14L2flot	mm							indeterminate	indeterminate		4	fragme	0
22E-26NF14L2flot	unident							indeterminate	indeterminate			fragme	2
22E-26NL1	lm							indeterminate	carpal/tarsal		1	1/2	6
22E-26NL1	Mammalia								tooth		4	fragme	1
22E-26NL1	lm/mm							fused	petris temporal		1	fragme	1
22E-26NL1	lm							fused	sesamoid		1	comple	2
22E-26NL1	lm							indeterminate	long bone		22	fragme	27
22E-26NL1	lm							indeterminate	rib/spine		4	fragme	4
22E-26NL1	lm							indeterminate	indeterminate		21	fragme	32
22E-26NL1	mm							indeterminate	long bone		178	fragme	58

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26NF14L1		long bone	b=2, c=3
22E-26NF14L1		rib/spine	b=1
22E-26NF14L1		indeterminate	
22E-26NF14L1		indeterminate	
22E-26NF14L2	zebu/buffalo	2nd phalanx	
22E-26NF14L2		indeterminate	
22E-26NF14L2		antler	
22E-26NF14L2		femur	
22E-26NF14L2		vert	
22E-26NF14L2		indeterminate	b=2
22E-26NF14L2		rib/spine	
22E-26NF14L2		rib	
22E-26NF14L2		long bone	b=9, c=1
22E-26NF14L2		rib/spine	b=1
22E-26NF14L2		indeterminate	
22E-26NF14L2		antler	
22E-26NF14L2		long bone	pc=1
22E-26NF14L2		long bone	c=1
22E-26NF14L2flot		antler	hack=1
22E-26NF14L2flot		skull	b=1
22E-26NF14L2flot		long bone	b=3, c=1
22E-26NF14L2flot		rib/spine	b=1
22E-26NF14L2flot		indeterminate	b=1, c=1
22E-26NF14L2flot		long bone	c=1
22E-26NF14L2flot		rib/spine	b=, c=3
22E-26NF14L2flot		indeterminate	b=3
22E-26NF14L2flot		indeterminate	
22E-26NL1		carpal/tarsal	
22E-26NL1		tooth	
22E-26NL1		petris temporal	
22E-26NL1		sesamoid	c=1
22E-26NL1		long bone	pc=1, c=15
22E-26NL1		rib/spine	c=4
22E-26NL1		indeterminate	c=19
22E-26NL1		long bone	b=3, c=109

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-26NL1	mm							indeterminate	rib/spine		32	fragme	8
22E-26NL1	mm							indeterminate	indeterminate		33	fragme	17
22E-26NL1	unident							indeterminate	indeterminate			fragme	148
22E-26NL10	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metacarpal		1	1/2	65
22E-26NL10	lm						Distal	indeterminate	phalanx		1	<1/4	3
22E-26NL10	mm						Distal	indeterminate	phalanx		2	<1/4	0
22E-26NL10	Reptilia	Sauria				lizard		fused	vert		1	comple	3
22E-26NL10	Mammalia	Rodentia				rat/mouse		fused	femur		4	comple	1
22E-26NL10	Mammalia	Rodentia				rat/mouse		fused	tibia		3	comple	0
22E-26NL10	Mammalia	Rodentia				rat/mouse		fused	innominate		2	fragme	0
22E-26NL10	Mammalia	Rodentia				rat/mouse		fused	sacrum		1	fragme	0
22E-26NL10	Mammalia	Rodentia				rat/mouse		fused	mandible	right	1	fragme	0
22E-26NL10	Mammalia	Rodentia				rat/mouse		fused	incisor		3	fragme	0
22E-26NL10	Mammalia	Rodentia				rat/mouse		fused	long bone		13	fragme	1
22E-26NL10	mm							indeterminate	vert, caudal		1	fragme	0
22E-26NL10	sm							indeterminate	vert, caudal		1	fragme	0
22E-26NL10	sm						Distal	indeterminate	scapula		1	comple	0
22E-26NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		unerupted	molar		1	comple	3
22E-26NL10	Aves					bird		indeterminate	long bone		1	fragme	0
22E-26NL10	Mammalia	Artiodactyla				L ruminant			molar		1	fragme	8
22E-26NL10	Mammalia								tooth		8	fragme	4
22E-26NL10	Osteichthyes/Reptilia					fish/reptile		indeterminate	indeterminate		2	fragme	0
22E-26NL10	lm							indeterminate	carpal/tarsal		1	fragme	4
22E-26NL10	mm							fused	costal cartilage		4	fragme	3
22E-26NL10	lm							indeterminate	scapula		1	<1/4	13
22E-26NL10	lm							indeterminate	vert		6	fragme	25
22E-26NL10	lm							unfused	vert		2	fragme	9
22E-26NL10	mm							indeterminate	vert		3	fragme	5
22E-26NL10	lm							indeterminate	skull		3	fragme	8
22E-26NL10	mm							indeterminate	skull		5	fragme	6
22E-26NL10	lm							indeterminate	long bone		37	fragme	95
22E-26NL10	lm							indeterminate	rib/spine		10	fragme	51
22E-26NL10	lm							indeterminate	rib		1	fragme	8
22E-26NL10	lm							indeterminate	indeterminate		23	fragme	77
22E-26NL10	mm							indeterminate	long bone		66	fragme	49

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26NL1		rib/spine	c=27
22E-26NL1		indeterminate	c=30
22E-26NL1		indeterminate	
22E-26NL10	L artiodactyl	metacarpal	
22E-26NL10		phalanx	
22E-26NL10		phalanx	
22E-26NL10	lizard	vert	
22E-26NL10	rat/mouse	femur	
22E-26NL10	rat/mouse	tibia	
22E-26NL10	rat/mouse	innominate	
22E-26NL10	rat/mouse	sacrum	
22E-26NL10	rat/mouse	mandible	
22E-26NL10	rat/mouse	incisor	
22E-26NL10	rat/mouse	long bone	
22E-26NL10		vert, caudal	
22E-26NL10		vert, caudal	
22E-26NL10		scapula	glenoid fossa
22E-26NL10	sheep/goat/de	molar	
22E-26NL10	bird	long bone	
22E-26NL10	L ruminant	molar	
22E-26NL10		tooth	
22E-26NL10	fish/reptile	indeterminate	
22E-26NL10		carpal/tarsal	
22E-26NL10		costal cartilage	
22E-26NL10		scapula	
22E-26NL10		vert	
22E-26NL10		vert	
22E-26NL10		vert	
22E-26NL10		skull	
22E-26NL10		skull	
22E-26NL10		long bone	b=2
22E-26NL10		rib/spine	
22E-26NL10		rib	
22E-26NL10		indeterminate	b=2, pc=2
22E-26NL10		long bone	b=9, pc=2, c=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
22E-26NL10	mm							indeterminate	rib/spine		23	fragme	10
22E-26NL10	mm							indeterminate	rib		3	fragme	3
22E-26NL10	mm							indeterminate	mandible		1	fragme	1
22E-26NL10	mm							indeterminate	indeterminate		27	fragme	31
22E-26NL10	unident							indeterminate	indeterminate			fragme	160
22E-26NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	femur		1	1/4	116
22E-26NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	right	1	comple	16
22E-26NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	left	1	3/4	20
22E-26NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	patella		1	3/4	22
22E-26NL11	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	fused	humerus		1	1/2	18
22E-26NL11	Reptilia	Testudines				turtle		fused	carapace		1	fragme	0
22E-26NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar	upper	1	3/4	11
22E-26NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar	upper	1	1/2	7
22E-26NL11	Mammalia	Artiodactyla				L ruminant		unerupted	premolar		1	comple	7
22E-26NL11	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	1/4	6
22E-26NL11	lm						Distal	fused	phalanx		2	1/4	9
22E-26NL11	lm							fused	sesamoid		3	3/4	6
22E-26NL11	mm							fused	sesamoid		1	comple	1
22E-26NL11	lm						Distal	fused	phalanx		1	1/4	6
22E-26NL11	Mammalia								tooth		11	fragme	4
22E-26NL11	mm							fused	costal cartilage		2	fragme	2
22E-26NL11	lm							fused	costal cartilage		1	fragme	7
22E-26NL11	lm/mm							unfused	long bone		2	fragme	0
22E-26NL11	lm							unfused	long bone		1	fragme	1
22E-26NL11	lm							indeterminate	vert		3	fragme	14
22E-26NL11	sm							indeterminate	vert		2	fragme	0
22E-26NL11	sm							indeterminate	innominate		1	1/2	0
22E-26NL11	sm							fused	femur		1	3/4	0
22E-26NL11	sm							fused	tibia		1	comple	0
22E-26NL11	sm							indeterminate	long bone		2	fragme	0
22E-26NL11	Aves/Reptilia					bird/reptile		indeterminate	skull		4	fragme	1
22E-26NL11	lm							indeterminate	skull		11	fragme	32
22E-26NL11	lm							indeterminate	long bone		28	fragme	184
22E-26NL11	lm							indeterminate	rib/spine		23	fragme	36
22E-26NL11	lm							indeterminate	indeterminate		18	fragme	50

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26NL10		rib/spine	b=2, c=4
22E-26NL10		rib	
22E-26NL10		mandible	
22E-26NL10		indeterminate	b=4
22E-26NL10		indeterminate	
22E-26NL11	zebu/buffalo	femur	DC 49.91
22E-26NL11	zebu/buffalo	2nd phalanx	pc=1, GL 39.54 Bp 27.92 Bd 24.46
22E-26NL11	zebu/buffalo	2nd phalanx	Bd 31.14
22E-26NL11	zebu/buffalo	patella	GB 46.25
22E-26NL11	goat	humerus	Bd 30.57 Bt 28.32
22E-26NL11	turtle	carapace	
22E-26NL11	zebu/buffalo	molar	dev=adult
22E-26NL11	zebu/buffalo	premolar	
22E-26NL11	L ruminant	premolar	
22E-26NL11	L artiodactyl	metapodial	
22E-26NL11		phalanx	
22E-26NL11		sesamoid	
22E-26NL11		sesamoid	
22E-26NL11		phalanx	b=1
22E-26NL11		tooth	
22E-26NL11		costal cartilage	
22E-26NL11		costal cartilage	
22E-26NL11		long bone	dev=fetal/newborn
22E-26NL11		long bone	dev=fetal/newborn
22E-26NL11		vert	
22E-26NL11		vert	
22E-26NL11		innominate	
22E-26NL11		femur	
22E-26NL11		tibia	
22E-26NL11		long bone	
22E-26NL11	bird/reptile	skull	pc=1
22E-26NL11		skull	cut=1
22E-26NL11		long bone	b=3
22E-26NL11		rib/spine	b=1, c=1
22E-26NL11		indeterminate	b=4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-26NL11	mm							indeterminate	long bone		95	fragme	51
22E-26NL11	mm							indeterminate	rib/spine		47	fragme	18
22E-26NL11	mm							indeterminate	skull		12	fragme	9
22E-26NL11	mm							indeterminate	indeterminate		64	fragme	58
22E-26NL11	unident							indeterminate	indeterminate			fragme	121
22E-26NL11	lm							indeterminate	rib/spine		1	fragme	1
22E-26NL11	mm							indeterminate	long bone		9	fragme	2
22E-26NL2	Mammalia	Artiodactyla				M artiodactyl	Proxim	fused	metapodial		1	<1/4	0
22E-26NL2	lm							indeterminate	astragalus		1	<1/4	1
22E-26NL2	lm							indeterminate	skull		2	fragme	1
22E-26NL2	Mammalia								tooth		22	fragme	6
22E-26NL2	lm							indeterminate	long bone		73	fragme	71
22E-26NL2	lm							indeterminate	indeterminate		18	fragme	17
22E-26NL2	mm							indeterminate	long bone		201	fragme	54
22E-26NL2	mm							indeterminate	rib/spine		39	fragme	9
22E-26NL2	mm							indeterminate	indeterminate		37	fragme	19
22E-26NL2	unident							indeterminate	indeterminate			fragme	123
22E-26NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	astragalus	right	1	comple	40
22E-26NL3	Mammalia	Artiodactyla	Cervidae	Cervus	unicolor	sambar		fused	M3	right	1	comple	28
22E-26NL3	Aves					bird		indeterminate	long bone		1	fragme	1
22E-26NL3	Osteichthyes					fish		indeterminate	indeterminate		2	fragme	1
22E-26NL3	Reptilia	Squamata				snake		fused	vert		2	comple	1
22E-26NL3	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare	Proxim	fused	ulna		1	1/2	0
22E-26NL3	sm						Distal	indeterminate	phalanx		1	3/4	0
22E-26NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	horn core		1	fragme	2
22E-26NL3	mm						Proxim	unfused	phalanx		1	1/4	0
22E-26NL3	Mammalia	Artiodactyla				l/m artiodacty	Distal	fused	metapodial		1	<1/4	1
22E-26NL3	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	1/4	11
22E-26NL3	Mammalia	Artiodactyla				M artiodactyl	shaft	fused	metapodial		1	fragme	1
22E-26NL3	lm						Distal	indeterminate	phalanx		1	<1/4	1
22E-26NL3	mm						Distal	indeterminate	phalanx		3	<1/4	2
22E-26NL3	mm							indeterminate	costal cartilage		2	fragme	1
22E-26NL3	lm							fused	sesamoid		1	comple	1
22E-26NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	central tarsal		1	1/2	13

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26NL11		long bone	b=12, c=3
22E-26NL11		rib/spine	b=14, c=7
22E-26NL11		skull	
22E-26NL11		indeterminate	b=7
22E-26NL11		indeterminate	
22E-26NL11		rib/spine	b=1
22E-26NL11		long bone	b=3, pc=2
22E-26NL2	M artiodactyl	metapodial	b=1
22E-26NL2		astragalus	c=1
22E-26NL2		skull	
22E-26NL2		tooth	
22E-26NL2		long bone	pc=7, c=19
22E-26NL2		indeterminate	b=2, c=8
22E-26NL2		long bone	b=4, pc=3, c=68
22E-26NL2		rib/spine	b=4, c=17
22E-26NL2		indeterminate	b=6, c=13
22E-26NL2		indeterminate	
22E-26NL3	zebu/buffalo	astragalus	Bd 44.35, GL1 68.01, GLm 61.85
22E-26NL3	sambar	M3	dev=e, L 37.03, B 12.11
22E-26NL3	bird	long bone	cut=1
22E-26NL3	fish	indeterminate	b=1
22E-26NL3	snake	vert	
22E-26NL3	Indian Hare	ulna	
22E-26NL3		phalanx	
22E-26NL3	zebu/buffalo	horn core	
22E-26NL3		phalanx	
22E-26NL3	l/m artiodactyl	metapodial	b=1
22E-26NL3	L artiodactyl	metapodial	
22E-26NL3	M artiodactyl	metapodial	
22E-26NL3		phalanx	
22E-26NL3		phalanx	
22E-26NL3		costal cartilage	
22E-26NL3		sesamoid	
22E-26NL3	zebu/buffalo	central tarsal	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-26NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	tarsal 2/3		1	comple	6
22E-26NL3	mm							indeterminate	carpal/tarsal		1	1/2	1
22E-26NL3	lm							indeterminate	vert		1	<1/4	2
22E-26NL3	mm							indeterminate	vert		1	1/2	1
22E-26NL3	Mammalia								tooth		35	fragme	10
22E-26NL3	lm							indeterminate	long bone		1	fragme	1
22E-26NL3	lm/mm							indeterminate	skull		3	fragme	2
22E-26NL3	lm							indeterminate	long bone		155	fragme	255
22E-26NL3	lm							indeterminate	rib/spine		24	fragme	20
22E-26NL3	lm							indeterminate	indeterminate		48	fragme	61
22E-26NL3	mm							indeterminate	long bone		527	fragme	164
22E-26NL3	mm							indeterminate	rib/spine		56	fragme	13
22E-26NL3	mm							indeterminate	indeterminate		114	fragme	52
22E-26NL3	unident							indeterminate	indeterminate			fragme	230
22E-26NL4	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	astragalus		1	3/4	4
22E-26NL4	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare	Proxim	fused	femur		1	1/4	0
22E-26NL4	Aves					bird		indeterminate	long bone		4	fragme	5
22E-26NL4	mm/sm						Proxim	unfused	femur		1	fragme	0
22E-26NL4	lm						Distal	indeterminate	phalanx		1	1/4	2
22E-26NL4	Mammalia							indeterminate	tooth		3	fragme	1
22E-26NL4	lm							indeterminate	vert		1	<1/4	10
22E-26NL4	Aves					bird		indeterminate	indeterminate		3	fragme	1
22E-26NL4	lm							indeterminate	indeterminate		4	fragme	9
22E-26NL4	lm							indeterminate	long bone		12	fragme	14
22E-26NL4	lm							indeterminate	rib/spine		6	fragme	15
22E-26NL4	mm							indeterminate	long bone		29	fragme	11
22E-26NL4	mm							indeterminate	rib/spine		28	fragme	10
22E-26NL4	mm							indeterminate	indeterminate		27	fragme	12
22E-26NL4	unident							indeterminate	indeterminate			fragme	29
22E-26NL5	unident							indeterminate	indeterminate			fragme	375
22E-26NL5	Aves					bird		indeterminate	long bone		7	fragme	7
22E-26NL5	lm						Proxim	fused	femur		1	1/2	43
22E-26NL5	lm						Distal	fused	femur/humerus		1	<1/4	25
22E-26NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	maxilla w/ M3		1	fragme	46

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26NL3	zebu/buffalo	tarsal 2/3	pc=1
22E-26NL3		carpal/tarsal	
22E-26NL3		vert	
22E-26NL3		vert	
22E-26NL3		tooth	
22E-26NL3		long bone	w=1, cut and tapered to point
22E-26NL3		skull	b=1
22E-26NL3		long bone	b=5, pc=18, c=7
22E-26NL3		rib/spine	b=4
22E-26NL3		indeterminate	b=8
22E-26NL3		long bone	b=66, pc=15, c=19
22E-26NL3		rib/spine	b=13
22E-26NL3		indeterminate	b=3, pc=2, c=7
22E-26NL3		indeterminate	
22E-26NL4	goat	astragalus	pc=1, cut=1, GLm 25.58 Bd 16.59
22E-26NL4	Indian Hare	femur	
22E-26NL4	bird	long bone	
22E-26NL4		femur	
22E-26NL4		phalanx	
22E-26NL4		tooth	
22E-26NL4		vert	
22E-26NL4	bird	indeterminate	
22E-26NL4		indeterminate	
22E-26NL4		long bone	pc=2, c=1
22E-26NL4		rib/spine	
22E-26NL4		long bone	b=8, c=2
22E-26NL4		rib/spine	b=8, c=3
22E-26NL4		indeterminate	pc=3, c=2
22E-26NL4		indeterminate	
22E-26NL5		indeterminate	
22E-26NL5	bird	long bone	b=2, cut=1
22E-26NL5		femur	hack=1
22E-26NL5		femur/humerus	
22E-26NL5	zebu/buffalo	maxilla w/ M3	dev=adult, L 36.12 B 14.83

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-26NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		unerupted	molar	lower	1	comple	14
22E-26NL5	lm								molar		1	1/2	4
22E-26NL5	mm							fused	costal cartilage		1	fragme	0
22E-26NL5	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		fused	mandible	right	1	fragme	0
22E-26NL5	Mammalia								tooth		12	fragme	5
22E-26NL5	lm/mm							unerupted	molar		1	comple	0
22E-26NL5	lm/mm							fused	carpal/tarsal		1	fragme	0
22E-26NL5	lm/mm							unfused	rib		3	fragme	2
22E-26NL5	Reptilia	Testudines	Trionychidae			softshell turtle		fused	plastron		1	fragme	0
22E-26NL5	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare	Distal	fused	humerus		1	fragme	0
22E-26NL5	Reptilia	Sauria				lizard		fused	vert		1	3/4	0
22E-26NL5	sm						shaft	indeterminate	long bone		1	3/4	0
22E-26NL5	lm							fused	innominate		4	fragme	53
22E-26NL5	lm							indeterminate	long bone		52	fragme	167
22E-26NL5	lm							indeterminate	rib/spine		25	fragme	47
22E-26NL5	lm							indeterminate	skull		31	fragme	72
22E-26NL5	lm						epiphy	unfused	vert		1	1/2	2
22E-26NL5	mm							indeterminate	long bone		82	fragme	60
22E-26NL5	mm							indeterminate	rib/spine		121	fragme	53
22E-26NL5	mm							indeterminate	indeterminate		67	fragme	59
22E-26NL5	Aves					bird		indeterminate	indeterminate		3	fragme	3
22E-26NL6	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		2	fragme	5
22E-26NL6	Mammalia	Artiodactyla				L artiodactyl		fused	3rd Phalanx		1	<1/4	2
22E-26NL6	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			horn core		3	fragme	7
22E-26NL6	mm							fused	mandible	left	1	1/4	4
22E-26NL6	mm						epiphy	unfused	phalanx		1	comple	0
22E-26NL6	lm							fused	carpal/tarsal		1	comple	3
22E-26NL6	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar	lower	1	comple	13
22E-26NL6	Mammalia								tooth		6	fragme	3
22E-26NL6	Mammalia							unerupted	tooth		1	fragme	1
22E-26NL6	Mammalia	Rodentia						fused	maxilla	left	1	1/2	0
22E-26NL6	sm							indeterminate	vert, caudal		1	comple	0
22E-26NL6	Reptilia	Sauria				lizard		fused	vert		1	3/4	0
22E-26NL6	lm							indeterminate	vert		2	fragme	10
22E-26NL6	lm							unfused	vert		1	fragme	5

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26NL5	zebu/buffalo	molar	
22E-26NL5		molar	
22E-26NL5		costal cartilage	
22E-26NL5	Indian Hare	mandible	teeth broken
22E-26NL5		tooth	b=1
22E-26NL5		molar	
22E-26NL5		carpal/tarsal	b=1
22E-26NL5		rib	dev=fetal/newborn
22E-26NL5	softshell turtle	plastron	
22E-26NL5	Indian Hare	humerus	
22E-26NL5	lizard	vert	
22E-26NL5		long bone	
22E-26NL5		innominate	
22E-26NL5		long bone	b=12, pc=2, c=1, sf=2
22E-26NL5		rib/spine	b=3, c=5, cut=1
22E-26NL5		skull	b=5
22E-26NL5		vert	c=9
22E-26NL5		long bone	b=17, pc=4
22E-26NL5		rib/spine	b=19, c=14
22E-26NL5		indeterminate	pc=11
22E-26NL5	bird	indeterminate	
22E-26NL6	softshell turtle	carapace	c=2
22E-26NL6	L artiodactyl	3rd Phalanx	
22E-26NL6	zebu/buffalo	horn core	
22E-26NL6		mandible	
22E-26NL6		phalanx	
22E-26NL6		carpal/tarsal	b=1
22E-26NL6	zebu/buffalo	molar	dev=I
22E-26NL6		tooth	
22E-26NL6		tooth	
22E-26NL6		maxilla	
22E-26NL6		vert, caudal	c=1
22E-26NL6	lizard	vert	
22E-26NL6		vert	
22E-26NL6		vert	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-26NL6	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		7	fragme	4
22E-26NL6	Aves					bird		indeterminate	long bone		4	fragme	1
22E-26NL6	lm							indeterminate	long bone		62	fragme	146
22E-26NL6	lm							indeterminate	rib/spine		17	fragme	55
22E-26NL6	lm							indeterminate	skull		18	fragme	50
22E-26NL6	lm							indeterminate	indeterminate		67	fragme	148
22E-26NL6	mm							indeterminate	long bone		61	fragme	43
22E-26NL6	mm							indeterminate	rib/spine		89	fragme	47
22E-26NL6	mm							indeterminate	indeterminate		37	fragme	32
22E-26NL6	unident							indeterminate	indeterminate			fragme	298
22E-26NL6	lm							indeterminate	long bone		1	fragme	2
22E-26NL6	lm/mm							indeterminate	indeterminate		1	fragme	0
22E-26NL6	mm							indeterminate	long bone		13	fragme	3
22E-26NL7	Reptilia	Squamata	Colubridae	Elaphe		Trinket snake		fused	vert		1	comple	0
22E-26NL7	Reptilia	Testudines				turtle		fused	vert		1	1/2	0
22E-26NL7	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		4	fragme	3
22E-26NL7	Reptilia	Testudines				turtle		fused	femur		1	3/4	1
22E-26NL7	Reptilia	Testudines				turtle		fused	coracoid		1	comple	0
22E-26NL7	Reptilia	Testudines				turtle		fused	long bone		4	fragme	1
22E-26NL7	Reptilia	Testudines	Trionychidae			softshell turtle		fused	carapace		17	fragme	31
22E-26NL7	Aves					bird		indeterminate	long bone		4	fragme	4
22E-26NL7	sm							indeterminate	long bone		3	fragme	0
22E-26NL7	sm/bird					sm/bird		indeterminate	indeterminate		1	fragme	0
22E-26NL7	mm						Proxim	indeterminate	phalanx		1	1/2	2
22E-26NL7	mm						Distal	indeterminate	phalanx		2	1/4	1
22E-26NL7	mm/sm							indeterminate	phalanx		2	fragme	0
22E-26NL7	Mammalia								antler		3	fragme	10
22E-26NL7	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		unerupted	molar	upper	1	comple	9
22E-26NL7	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar	lower	1	comple	3
22E-26NL7	Mammalia								tooth		8	fragme	2
22E-26NL7	mm							indeterminate	scapula		1	3/4	3
22E-26NL7	mm						Proxim	unfused	femur		1	comple	1
22E-26NL7	lm							indeterminate	vert		5	fragme	20
22E-26NL7	lm							indeterminate	skull		5	fragme	26
22E-26NL7	lm							indeterminate	long bone		67	fragme	215

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26NL6	bird/reptile	indeterminate	
22E-26NL6	bird	long bone	c=1
22E-26NL6		long bone	b=3, pc=7, c=6
22E-26NL6		rib/spine	b=3, pc=1
22E-26NL6		skull	
22E-26NL6		indeterminate	b=5, pc=7, c=5
22E-26NL6		long bone	b=3, c=6
22E-26NL6		rib/spine	b=18, c=18
22E-26NL6		indeterminate	b=8, pc=3
22E-26NL6		indeterminate	
22E-26NL6		long bone	b=1
22E-26NL6		indeterminate	
22E-26NL6		long bone	b=8
22E-26NL7	Trinket snake	vert	
22E-26NL7	turtle	vert	
22E-26NL7	softshell turtle	carapace	
22E-26NL7	turtle	femur	
22E-26NL7	turtle	coracoid	L 22.78
22E-26NL7	turtle	long bone	c=1
22E-26NL7	softshell turtle	carapace	c=17
22E-26NL7	bird	long bone	c=1
22E-26NL7		long bone	b=1
22E-26NL7	sm/bird	indeterminate	
22E-26NL7		phalanx	Bp 12.93
22E-26NL7		phalanx	
22E-26NL7		phalanx	
22E-26NL7		antler	
22E-26NL7	zebu/buffalo	molar	
22E-26NL7	zebu/buffalo	premolar	dev=j
22E-26NL7		tooth	
22E-26NL7		scapula	glenoid fossa
22E-26NL7		femur	
22E-26NL7		vert	hack=1
22E-26NL7		skull	
22E-26NL7		long bone	b=5, c=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
22E-26NL7	lm							indeterminate	rib/spine		16	fragme	32
22E-26NL7	lm							indeterminate	indeterminate		31	fragme	100
22E-26NL7	mm							indeterminate	long bone		179	fragme	112
22E-26NL7	mm							indeterminate	rib/spine		57	fragme	26
22E-26NL7	mm							indeterminate	skull		7	fragme	?
22E-26NL7	mm							indeterminate	indeterminate		79	fragme	77
22E-26NL7	unident							indeterminate	indeterminate			fragme	165
22E-26NL7	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	1
22E-26NL7	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	plastron		1	fragme	0
22E-26NL7	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	3rd Phalanx		1	3/4	2
22E-26NL7	mm						Distal e	unfused	phalanx		1	comple	0
22E-26NL7	lm							fused	sesamoid		1	comple	1
22E-26NL7	sm							indeterminate	long bone		3	fragme	0
22E-26NL7	lm						centrur	fused	vert		1	fragme	28
22E-26NL7	Mammalia							indeterminate	tooth		1	fragme	0
22E-26NL7	lm/mm							indeterminate	skull		7	fragme	8
22E-26NL7	lm							indeterminate	long bone		16	fragme	32
22E-26NL7	lm							indeterminate	rib/spine		2	fragme	8
22E-26NL7	lm							indeterminate	indeterminate		12	fragme	33
22E-26NL7	mm							indeterminate	long bone		46	fragme	32
22E-26NL7	mm							indeterminate	rib/spine		5	fragme	0
22E-26NL7	mm							indeterminate	indeterminate		18	fragme	10
22E-26NL7	unident							indeterminate	indeterminate			fragme	38
22E-26NL7Sjar	lm							fused	costal cartilage		2	fragme	7
22E-26NL7Sjar	Mammalia								tooth		1	fragme	0
22E-26NL7Sjar	mm							indeterminate	long bone		21	fragme	8
22E-26NL7Sjar	mm							indeterminate	indeterminate		2	fragme	1
22E-26NL8	Reptilia	Sauria				lizard		fused	vert		1	comple	1
22E-26NL8	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	1
22E-26NL8	sm							indeterminate	long bone		3	fragme	0
22E-26NL8	sm/bird					sm/bird		indeterminate	indeterminate		5	fragme	3
22E-26NL8	sm							indeterminate	vert		1	fragme	0
22E-26NL8	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	right	1	3/4	14
22E-26NL8	lm						Proxim	indeterminate	femur		1	1/4	50
22E-26NL8	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar	lower	1	comple	12

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26NL7		rib/spine	b=2, pc=1
22E-26NL7		indeterminate	b=6
22E-26NL7		long bone	b=27, c=17
22E-26NL7		rib/spine	b=17, c=10
22E-26NL7		skull	b=1
22E-26NL7		indeterminate	b=13, c=2
22E-26NL7		indeterminate	
22E-26NL7	softshell turtle	carapace	
22E-26NL7	softshell turtle	plastron	
22E-26NL7	pig	3rd Phalanx	b=1, MBS 7.16
22E-26NL7		phalanx	b=1
22E-26NL7		sesamoid	
22E-26NL7		long bone	
22E-26NL7		vert	
22E-26NL7		tooth	
22E-26NL7		skull	
22E-26NL7		long bone	b=1, c=1
22E-26NL7		rib/spine	
22E-26NL7		indeterminate	b=2
22E-26NL7		long bone	b=15, c=5
22E-26NL7		rib/spine	b=2, c=1
22E-26NL7		indeterminate	
22E-26NL7		indeterminate	
22E-26NL7Sjar		costal cartilage	
22E-26NL7Sjar		tooth	
22E-26NL7Sjar		long bone	b=5, c=2
22E-26NL7Sjar		indeterminate	
22E-26NL8	lizard	vert	b=1
22E-26NL8	softshell turtle	carapace	c=1
22E-26NL8		long bone	
22E-26NL8	sm/bird	indeterminate	
22E-26NL8		vert	
22E-26NL8	zebu/buffalo	2nd phalanx	Bd 26.59
22E-26NL8		femur	pc=1, cut=1, hack=1
22E-26NL8	zebu/buffalo	premolar	c=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
22E-26NL8	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			incisor		1	3/4	4
22E-26NL8	mm							indeterminate	hyoid		1	1/2	1
22E-26NL8	Mammalia								antler		4	fragme	5
22E-26NL8	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	intermediate (	right	1	comple	16
22E-26NL8	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	ulnar carpal	right	1	comple	13
22E-26NL8	mm							fused	sesamoid		1	comple	0
22E-26NL8	Mammalia								tooth		16	fragme	7
22E-26NL8	lm							indeterminate	mandible		1	<1/4	9
22E-26NL8	lm							indeterminate	scapula		1	fragme	13
22E-26NL8	lm							indeterminate	vert		6	fragme	27
22E-26NL8	mm							indeterminate	vert		1	fragme	1
22E-26NL8	lm							indeterminate	skull		5	fragme	12
22E-26NL8	lm							indeterminate	long bone		63	fragme	181
22E-26NL8	lm							indeterminate	rib/spine		11	fragme	50
22E-26NL8	lm							indeterminate	rib		5	fragme	13
22E-26NL8	lm							indeterminate	indeterminate		36	fragme	102
22E-26NL8	mm							indeterminate	long bone		121	fragme	78
22E-26NL8	mm							indeterminate	rib/spine		13	fragme	8
22E-26NL8	mm							indeterminate	indeterminate		30	fragme	29
22E-26NL8	unident							indeterminate	indeterminate			fragme	128
22E-26NL8	lm							indeterminate	long bone		3	fragme	3
22E-26NL8	lm							indeterminate	rib/spine		1	fragme	2
22E-26NL8	mm							indeterminate	long bone		12	fragme	3
22E-26NL8	mm							indeterminate	indeterminate		5	fragme	2
22E-26NL9	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	3rd phalanx	left	1	comple	13
22E-26NL9	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	calcaneus	left	1	fragme	66
22E-26NL9	Mammalia	Carnivora	Felidae			S felid	Proxim	fused	tibia		1	1/2	6
22E-26NL9	mm							indeterminate	long bone		1	fragme	3
22E-26NL9	lm						Distal	indeterminate	calcaneus		1	1/2	29
22E-26NL9	Mammalia	Rodentia				rat/mouse		fused	maxilla		1	fragme	0
22E-26NL9	Mammalia	Rodentia				rat/mouse		fused	mandible	right	1	fragme	0
22E-26NL9	Mammalia	Rodentia				rat/mouse		fused	skull		2	fragme	1
22E-26NL9	Mammalia	Rodentia				rat/mouse		fused	vert		2	fragme	0
22E-26NL9	Mammalia	Rodentia				rat/mouse		fused	long bone		4	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26NL8	zebu/buffalo	incisor	
22E-26NL8		hyoid	cut=1
22E-26NL8		antler	b=2
22E-26NL8	zebu/buffalo	intermediate carpal	
22E-26NL8	zebu/buffalo	ulnar carpal	
22E-26NL8		sesamoid	
22E-26NL8		tooth	
22E-26NL8		mandible	
22E-26NL8		scapula	
22E-26NL8		vert	b=1
22E-26NL8		vert	
22E-26NL8		skull	
22E-26NL8		long bone	b=4, pc=2, c=1
22E-26NL8		rib/spine	
22E-26NL8		rib	
22E-26NL8		indeterminate	b=4
22E-26NL8		long bone	b=18, pc=5, c=5
22E-26NL8		rib/spine	b=4, c=1
22E-26NL8		indeterminate	b=3
22E-26NL8		indeterminate	
22E-26NL8		long bone	c=1
22E-26NL8		rib/spine	b=1
22E-26NL8		long bone	b=6
22E-26NL8		indeterminate	b=2
22E-26NL9	zebu	3rd phalanx	DLS 52.8 Ld 43.38 MBS 18.58
22E-26NL9	zebu/buffalo	calcaneus	
22E-26NL9	S felid	tibia	Bp 30.41
22E-26NL9		long bone	
22E-26NL9		calcaneus	
22E-26NL9	rat/mouse	maxilla	
22E-26NL9	rat/mouse	mandible	
22E-26NL9	rat/mouse	skull	
22E-26NL9	rat/mouse	vert	
22E-26NL9	rat/mouse	long bone	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-26NL9	Mammalia	Rodentia				rat/mouse		indeterminate	indeterminate		2	fragme	0
22E-26NL9	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			canine		1	3/4	3
22E-26NL9	Aves					bird		indeterminate	long bone		3	fragme	5
22E-26NL9	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	0
22E-26NL9	Mammalia	Artiodactyla				M ruminant			premolar		1	fragme	1
22E-26NL9	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		unerupted	molar		1	comple	1
22E-26NL9	mm							fused	costal cartilage		2	fragme	2
22E-26NL9	mm							indeterminate	mandible		3	<1/4	6
22E-26NL9	mm/sm							indeterminate	long bone		2	fragme	1
22E-26NL9	Mammalia								tooth		12	fragme	4
22E-26NL9	lm							indeterminate	vert, caudal		1	1/2	4
22E-26NL9	lm							indeterminate	vert		5	fragme	49
22E-26NL9	mm							indeterminate	vert		1	fragme	1
22E-26NL9	lm							indeterminate	skull		2	fragme	2
22E-26NL9	lm							indeterminate	long bone		58	fragme	257
22E-26NL9	lm							indeterminate	rib/spine		13	fragme	40
22E-26NL9	lm							indeterminate	indeterminate		18	fragme	43
22E-26NL9	mm							indeterminate	long bone		125	fragme	77
22E-26NL9	mm							indeterminate	rib/spine		34	fragme	20
22E-26NL9	mm							indeterminate	indeterminate		14	fragme	15
22E-26NL9	unident							indeterminate	indeterminate			fragme	139
22E-26Nnjarflot	Mammalia								antler		9	fragme	8
22E-26Nnjarflot	lm							indeterminate	long bone		3	fragme	2
22E-26Nnjarflot	mm							indeterminate	long bone		7	fragme	1
22E-26Nnjarflot	sm							indeterminate	vert, caudal		1	fragme	0
22E-26Nnjarflot	unident							indeterminate	indeterminate			fragme	1
22E-26Nsjarbaseflot	Reptilia	Sauria	Varanidae	Varanus		monitor lizard		fused	mandible		1	comple	0
22E-26Nsjarbaseflot	sm							indeterminate	long bone		3	fragme	0
22E-26Nsjarbaseflot	Reptilia					reptile			tooth		1	fragme	0
22E-26Nsjarbaseflot	lm							indeterminate	skull		3	fragme	10
22E-26Nsjarbaseflot	lm							indeterminate	long bone		3	fragme	2
22E-26Nsjarbaseflot	mm							indeterminate	long bone		15	fragme	3
22E-26Nsjarbaseflot	mm							indeterminate	indeterminate		5	fragme	1
22E-26Nsjarbaseflot	unident							indeterminate	indeterminate			fragme	2
22E-26Nsjarflot	sm							indeterminate	1st phalanx		1	3/4	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26NL9	rat/mouse	indeterminate	
22E-26NL9	zebu/buffalo	canine	
22E-26NL9	bird	long bone	
22E-26NL9	softshell turtle	carapace	
22E-26NL9	M ruminant	premolar	
22E-26NL9	sheep/goat/de	molar	
22E-26NL9		costal cartilag	c=1
22E-26NL9		mandible	
22E-26NL9		long bone	
22E-26NL9		tooth	
22E-26NL9		vert, caudal	
22E-26NL9		vert	
22E-26NL9		vert	
22E-26NL9		skull	
22E-26NL9		long bone	b=6, pc=2
22E-26NL9		rib/spine	
22E-26NL9		indeterminate	
22E-26NL9		long bone	b=16, c=3
22E-26NL9		rib/spine	b=4, pc=1
22E-26NL9		indeterminate	b=1, c=1
22E-26NL9		indeterminate	
22E-26Nnjarflot		antler	
22E-26Nnjarflot		long bone	b=1
22E-26Nnjarflot		long bone	b=1
22E-26Nnjarflot		vert, caudal	
22E-26Nnjarflot		indeterminate	
22E-26Nsjarbaseflot	monitor lizard	mandible	b=1
22E-26Nsjarbaseflot		long bone	
22E-26Nsjarbaseflot	reptile	tooth	
22E-26Nsjarbaseflot		skull	
22E-26Nsjarbaseflot		long bone	
22E-26Nsjarbaseflot		long bone	b=4
22E-26Nsjarbaseflot		indeterminate	b=2
22E-26Nsjarbaseflot		indeterminate	
22E-26Nsjarflot		1st phalanx	GL 13.06

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-26Nsjarflot	Reptilia	Testudines				turtle		fused	carapace		1	fragme	0
22E-26Nsjarflot	Mammalia								antler		2	fragme	1
22E-26Nsjarflot	Mammalia	Rodentia				rat/mouse		unerupted	molar		1	fragme	0
22E-26Nsjarflot	lm/mm							unerupted	molar		1	<1/4	0
22E-26Nsjarflot	lm							indeterminate	long bone		1	fragme	1
22E-26Nsjarflot	lm							indeterminate	rib/spine		2	fragme	1
22E-26Nsjarflot	lm							indeterminate	indeterminate		4	fragme	1
22E-26Nsjarflot	mm							indeterminate	long bone		6	fragme	1
22E-26Nsjarflot	mm							indeterminate	rib/spine		3	fragme	0
22E-26Nsjarflot	unident							indeterminate	indeterminate			fragme	1
22E-28NF10L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	3rd Phalanx		1	1/2	16
22E-28NF10L1	lm							fused	calcaneus		1	1/4	26
22E-28NF10L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar	lower	1	comple	17
22E-28NF10L1	Mammalia	Artiodactyla				L artiodactyl	Proxim	unfused	phalanx		1	1/2	2
22E-28NF10L1	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	phalanx		1	<1/4	2
22E-28NF10L1	Mammalia								tooth		12	fragme	12
22E-28NF10L1	lm							indeterminate	skull		2	fragme	3
22E-28NF10L1	lm							indeterminate	long bone		14	fragme	25
22E-28NF10L1	lm							indeterminate	indeterminate		10	fragme	13
22E-28NF10L1	mm							indeterminate	long bone		74	fragme	24
22E-28NF10L1	mm							indeterminate	rib/spine		22	fragme	10
22E-28NF10L1	mm							indeterminate	skull		4	fragme	3
22E-28NF10L1	mm							indeterminate	indeterminate		2	fragme	13
22E-28NF10L1	unident							indeterminate	indeterminate			fragme	34
22E-28NF10L1	sm							indeterminate	tibia		1	fragme	0
22E-28NF10L1	sm							indeterminate	ulna		1	fragme	0
22E-28NF10L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			incisor		1	1/2	2
22E-28NF10L1	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		indeterminate	premaxilla		1	fragme	2
22E-28NF10L1	sm/bird					sm/bird		indeterminate	skull		2	fragme	1
22E-28NF10L1	Mammalia								antler		1	fragme	1
22E-28NF10L1	mm								molar		1	1/2	0
22E-28NF10L1	lm							indeterminate	vert		7	fragme	27
22E-28NF10L1	lm							indeterminate	long bone		9	fragme	33
22E-28NF10L1	lm							indeterminate	rib/spine		6	fragme	8
22E-28NF10L1	lm							indeterminate	indeterminate		9	fragme	12

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-26Nsjarflot	turtle	carapace	pc=1
22E-26Nsjarflot		antler	
22E-26Nsjarflot	rat/mouse	molar	
22E-26Nsjarflot		molar	
22E-26Nsjarflot		long bone	
22E-26Nsjarflot		rib/spine	
22E-26Nsjarflot		indeterminate	b=1
22E-26Nsjarflot		long bone	b=2
22E-26Nsjarflot		rib/spine	b=1
22E-26Nsjarflot		indeterminate	
all unitsF10L1	zebu	3rd Phalanx	MBS 19.6
all unitsF10L1		calcaneus	b=1
all unitsF10L1	zebu/buffalo	molar	dev=k
all unitsF10L1	L artiodactyl	phalanx	
all unitsF10L1	L artiodactyl	phalanx	
all unitsF10L1		tooth	
all unitsF10L1		skull	
all unitsF10L1		long bone	b=2
all unitsF10L1		indeterminate	
all unitsF10L1		long bone	b=5, c=3
all unitsF10L1		rib/spine	b=5
all unitsF10L1		skull	
all unitsF10L1		indeterminate	b=3, pc=1
all unitsF10L1		indeterminate	
all unitsF10L1		tibia	
all unitsF10L1		ulna	
all unitsF10L1	zebu/buffalo	incisor	
all unitsF10L1	Indian Hare	premaxilla	
all unitsF10L1	sm/bird	skull	
all unitsF10L1		antler	
all unitsF10L1		molar	
all unitsF10L1		vert	
all unitsF10L1		long bone	b=2
all unitsF10L1		rib/spine	
all unitsF10L1		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-28NF10L1	mm							indeterminate	long bone		28	fragme	9
22E-28NF10L1	mm							indeterminate	rib/spine		12	fragme	2
22E-28NF10L1	mm							indeterminate	indeterminate		17	fragme	8
22E-28NF10L1	unident							indeterminate	indeterminate			fragme	12
22E-28NF12L1	lm						Distal	indeterminate	radius		1	1/4	121
22E-28NF12L1	lm						Distal	indeterminate	humerus		1	1/4	44
22E-28NF12L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	calcaneus	right	1	1/2	20
22E-28NF12L1	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo	Distal	fused	tibia	right	1	1/2	65
22E-28NF12L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	tibia	left	1	<1/4	13
22E-28NF12L1	Osteichthyes					L freshwater fish		indeterminate	skull		1	fragme	0
22E-28NF12L1	Mammalia	Artiodactyla	Suidae	Sus		pig	Proxim	fused	5th metacarpal		1	1/4	3
22E-28NF12L1	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	2nd metatarsal		1	1/4	3
22E-28NF12L1	mm						Proxim	fused	metapodial		1	<1/4	2
22E-28NF12L1	lm						Distal	unfused	long bone		1	fragme	3
22E-28NF12L1	mm							fused	mandible		1	<1/4	2
22E-28NF12L1	Mammalia								tooth		2	fragme	0
22E-28NF12L1	lm							indeterminate	long bone		25	fragme	86
22E-28NF12L1	lm							indeterminate	rib/spine		2	fragme	3
22E-28NF12L1	lm							indeterminate	indeterminate		7	fragme	36
22E-28NF12L1	mm							indeterminate	long bone		18	fragme	12
22E-28NF12L1	mm							indeterminate	rib/spine		5	fragme	2
22E-28NF12L1	mm							indeterminate	indeterminate		11	fragme	8
22E-28NF12L1	unident							indeterminate	indeterminate			fragme	29
22E-28NF12L1	Reptilia	Sauria	Varanidae	Varanus		monitor lizard		fused	mandible	left	1	comple	1
22E-28NF12L1	Reptilia	Sauria	Varanidae	Varanus		monitor lizard		fused	mandible	right	1	comple	1
22E-28NF12L1	Reptilia	Sauria	Varanidae	Varanus		monitor lizard		fused	maxilla	left	1	comple	0
22E-28NF12L1	Reptilia	Sauria	Varanidae	Varanus		monitor lizard		fused	maxilla	right	1	comple	0
22E-28NF12L1	Aves	Anseriformes	Anatidae			duck sp.		fused	tarsometatars	left	1	comple	2
22E-28NF12L1	Aves	Anseriformes	Anatidae			duck sp.		fused	tarsometatars	right	1	comple	2
22E-28NF12L1	Aves					bird		indeterminate	phalanx		8	fragme	0
22E-28NF12L1	Aves					bird		indeterminate	vert		2	fragme	0
22E-28NF12L1	Aves					bird		indeterminate	long bone		3	fragme	1
22E-28NF12L1	Aves					bird		indeterminate	indeterminate		4	fragme	1
22E-28NF12L1	Reptilia					reptile		indeterminate	skull		26	fragme	5
22E-28NF12L1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	unfused	1st phalanx		1	comple	6

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
all unitsF10L1		long bone	b=4, pc=3, c=2
all unitsF10L1		rib/spine	b=6
all unitsF10L1		indeterminate	b=2
all unitsF10L1		indeterminate	
22E-28NF12L1		radius	
22E-28NF12L1		humerus	
22E-28NF12L1	zebu	calcaneus	
22E-28NF12L1	buffalo	tibia	Bd 60.23
22E-28NF12L1	zebu/buffalo	tibia	
22E-28NF12L1	L freshwater fis	skull	
22E-28NF12L1	pig	5th metacarpal	
22E-28NF12L1	pig	2nd metatars	b=1
22E-28NF12L1		metapodial	
22E-28NF12L1		long bone	
22E-28NF12L1		mandible	dev=old adult, mandible w. PM, severly worn
22E-28NF12L1		tooth	
22E-28NF12L1		long bone	b=3, c=2
22E-28NF12L1		rib/spine	
22E-28NF12L1		indeterminate	
22E-28NF12L1		long bone	b=2, c=2
22E-28NF12L1		rib/spine	b=1
22E-28NF12L1		indeterminate	
22E-28NF12L1		indeterminate	
22E-28NF12L1	monitor lizard	mandible	
22E-28NF12L1	monitor lizard	mandible	
22E-28NF12L1	monitor lizard	maxilla	
22E-28NF12L1	monitor lizard	maxilla	
22E-28NF12L1	duck sp.	tarsometatars	GL 61.66, Bp 10.31, Sc 5.29, Bd 11.13
22E-28NF12L1	duck sp.	tarsometatars	GL 60.93, Bp 11.14, Sc 5.42, Bd 11.50
22E-28NF12L1	bird	phalanx	
22E-28NF12L1	bird	vert	
22E-28NF12L1	bird	long bone	
22E-28NF12L1	bird	indeterminate	
22E-28NF12L1	reptile	skull	
22E-28NF12L1	zebu/buffalo	1st phalanx	Bp 25.71

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-28NF12L1	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	calcaneus		1	1/2	53
22E-28NF12L1	lm						Distal	indeterminate	femur		1	<1/4	31
22E-28NF12L1	lm						Proxim	indeterminate	femur		1	1/2	33
22E-28NF12L1	lm							indeterminate	acetabulum		1	1/4	10
22E-28NF12L1	lm							indeterminate	carpal/tarsal		1	1/2	6
22E-28NF12L1	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	ulnar carpal		1	comple	1
22E-28NF12L1	Mammalia	Artiodactyla				L/m ruminant			premolar		1	fragme	1
22E-28NF12L1	Mammalia								tooth		6	fragme	0
22E-28NF12L1	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	3rd Phalanx		1	3/4	2
22E-28NF12L1	lm							indeterminate	vert		4	fragme	49
22E-28NF12L1	lm							unfused	vert		1	fragme	12
22E-28NF12L1	lm							indeterminate	skull		3	fragme	32
22E-28NF12L1	lm							indeterminate	long bone		24	fragme	75
22E-28NF12L1	lm							indeterminate	indeterminate		21	fragme	78
22E-28NF12L1	mm							indeterminate	long bone		37	fragme	26
22E-28NF12L1	mm							indeterminate	rib/spine		4	fragme	2
22E-28NF12L1	mm							indeterminate	mandible		1	<1/4	1
22E-28NF12L1	mm							indeterminate	indeterminate		54	fragme	45
22E-28NF12L1	unident							indeterminate	indeterminate			fragme	68
22E-28NF12L1	Mammalia	Artiodactyla				L artiodactyl	Proxim	fused	metapodial		1	<1/4	1
22E-28NF12L1	lm/mm						centrur	unfused	vert		1	<1/4	0
22E-28NF12L1	lm							indeterminate	long bone		1	fragme	1
22E-28NF12L1	mm							indeterminate	long bone		5	fragme	1
22E-28NF12L1flot	Mammalia	Carnivora	Canidae			canis sp.		fused	3rd Phalanx		1	comple	0
22E-28NF12L1flot	lm							indeterminate	long bone		4	fragme	7
22E-28NF12L1flot	lm							indeterminate	rib/spine		1	fragme	2
22E-28NF12L1flot	mm							indeterminate	long bone		9	fragme	2
22E-28NF12L1flot	unident							indeterminate	indeterminate			fragme	2
22E-28NF12L2	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	astragalus	left	1	comple	6
22E-28NF12L2	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		unerupted	M3		1	comple	2
22E-28NF12L2	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal e	unfused	femur	right	1	comple	10
22E-28NF12L2	Mammalia	Artiodactyla	Suidae	Sus		pig	Proxim	fused	4th metatarsa	left	1	1/2	7
22E-28NF12L2	Reptilia	Sauria				lizard		fused	vert		2	comple	2
22E-28NF12L2	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		unworn	premolar	lower	2	comple	0
22E-28NF12L2	Mammalia	Rodentia				rat/mouse		fused	femur		1	comple	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-28NF12L1	zebu	calcaneus	GB 57.32
22E-28NF12L1		femur	
22E-28NF12L1		femur	
22E-28NF12L1		acetabulum	
22E-28NF12L1		carpal/tarsal	
22E-28NF12L1	sheep/goat/de	ulnar carpal	
22E-28NF12L1	L/m ruminant	premolar	dev=old adult, very worn
22E-28NF12L1		tooth	
22E-28NF12L1	goat	3rd Phalanx	MBS 4.93
22E-28NF12L1		vert	
22E-28NF12L1		vert	
22E-28NF12L1		skull	
22E-28NF12L1		long bone	b=2
22E-28NF12L1		indeterminate	
22E-28NF12L1		long bone	b=5
22E-28NF12L1		rib/spine	b=2
22E-28NF12L1		mandible	cut=1
22E-28NF12L1		indeterminate	b=4, c=1
22E-28NF12L1		indeterminate	
22E-28NF12L1	L artiodactyl	metapodial	
22E-28NF12L1		vert	
22E-28NF12L1		long bone	pc=1
22E-28NF12L1		long bone	b=1
22E-28NF12L1flot	canis sp.	3rd Phalanx	GL 9.69
22E-28NF12L1flot		long bone	
22E-28NF12L1flot		rib/spine	b=1
22E-28NF12L1flot		long bone	
22E-28NF12L1flot		indeterminate	
22E-28NF12L2	goat	astragalus	GL1 30.71 GLm 29.64 D1 15.61 Bd 18.93
22E-28NF12L2	sheep/goat	M3	L 16.82 B 5.70
22E-28NF12L2	goat	femur	Bd 36.98
22E-28NF12L2	pig	4th metatarsa	Bp 13.26
22E-28NF12L2	lizard	vert	
22E-28NF12L2	sheep/goat	premolar	
22E-28NF12L2	rat/mouse	femur	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-28NF12L2	Mammalia	Rodentia				rat/mouse		fused	innominate		1	fragme	0
22E-28NF12L2	Mammalia	Rodentia				rat/mouse		fused	vert		7	fragme	1
22E-28NF12L2	Mammalia	Rodentia				rat/mouse		fused	long bone		10	fragme	1
22E-28NF12L2	Mammalia	Rodentia				rat/mouse		fused	skull		3	fragme	1
22E-28NF12L2	Reptilia	Testudines	Emydidae			box turtle		fused	femur		1	3/4	1
22E-28NF12L2	lm							fused	costal cartilage		6	fragme	17
22E-28NF12L2	mm							fused	costal cartilage		5	fragme	2
22E-28NF12L2	Mammalia								antler		1	fragme	1
22E-28NF12L2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			premolar		1	fragme	5
22E-28NF12L2	Mammalia								tooth		6	fragme	5
22E-28NF12L2	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		2	fragme	1
22E-28NF12L2	mm							indeterminate	scapula		1	1/2	33
22E-28NF12L2	mm							indeterminate	mandible		1	1/4	4
22E-28NF12L2	lm							indeterminate	vert		3	1/4	44
22E-28NF12L2	mm							indeterminate	vert		2	<1/4	1
22E-28NF12L2	mm							indeterminate	hyoid		1	1/2	1
22E-28NF12L2	lm							indeterminate	skull		8	fragme	12
22E-28NF12L2	lm							indeterminate	long bone		38	fragme	115
22E-28NF12L2	lm							indeterminate	rib/spine		4	fragme	6
22E-28NF12L2	lm							indeterminate	indeterminate		24	fragme	66
22E-28NF12L2	mm							indeterminate	long bone		93	fragme	58
22E-28NF12L2	mm							indeterminate	rib/spine		20	fragme	8
22E-28NF12L2	mm							indeterminate	indeterminate		35	fragme	33
22E-28NF12L2	unident							indeterminate	indeterminate			fragme	101
22E-28NF12L2flot	Mammalia	Carnivora	Canidae			canis sp.	Proxim	fused	metapodial		1	1/4	0
22E-28NF12L2flot	Mammalia								antler		8	fragme	3
22E-28NF12L2flot	lm							indeterminate	indeterminate		2	fragme	1
22E-28NF12L2flot	mm							indeterminate	long bone		8	fragme	2
22E-28NF12L2flot	mm							indeterminate	rib/spine		5	fragme	1
22E-28NF12L2flot	mm							indeterminate	indeterminate		5	fragme	1
22E-28NF12L2flot	unident							indeterminate	indeterminate			fragme	2
22E-28NL1	mm							fused	Lateral Malleolus		1	comple	3
22E-28NL1	lm						Distal	indeterminate	phalanx		1	1/4	2
22E-28NL1	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	2
22E-28NL1	Mammalia								tooth		5	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-28NF12L2	rat/mouse	innominate	
22E-28NF12L2	rat/mouse	vert	
22E-28NF12L2	rat/mouse	long bone	
22E-28NF12L2	rat/mouse	skull	
22E-28NF12L2	box turtle	femur	Bp 10.96
22E-28NF12L2		costal cartilage	
22E-28NF12L2		costal cartilage	
22E-28NF12L2		antler	
22E-28NF12L2	zebu/buffalo	premolar	
22E-28NF12L2		tooth	
22E-28NF12L2	bird/reptile	indeterminate	b=1
22E-28NF12L2		scapula	hack=1
22E-28NF12L2		mandible	
22E-28NF12L2		vert	hack=2
22E-28NF12L2		vert	
22E-28NF12L2		hyoid	
22E-28NF12L2		skull	
22E-28NF12L2		long bone	b=4, cut=1
22E-28NF12L2		rib/spine	
22E-28NF12L2		indeterminate	hack=1
22E-28NF12L2		long bone	b=5
22E-28NF12L2		rib/spine	b=6, c=1
22E-28NF12L2		indeterminate	b=2
22E-28NF12L2		indeterminate	
22E-28NF12L2flot	canis sp.	metapodial	
22E-28NF12L2flot		antler	
22E-28NF12L2flot		indeterminate	
22E-28NF12L2flot		long bone	b=3
22E-28NF12L2flot		rib/spine	
22E-28NF12L2flot		indeterminate	c=1
22E-28NF12L2flot		indeterminate	
22E-28NL1		Lateral Malleolus	
22E-28NL1		phalanx	c=1
22E-28NL1	L artiodactyl	metapodial	c=1
22E-28NL1		tooth	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-28NL1	lm							indeterminate	long bone		24	fragme	37
22E-28NL1	lm							indeterminate	indeterminate		11	fragme	14
22E-28NL1	mm							indeterminate	long bone		149	fragme	64
22E-28NL1	mm							indeterminate	rib/spine		17	fragme	5
22E-28NL1	mm							indeterminate	indeterminate		21	fragme	10
22E-28NL1	unident							indeterminate	indeterminate			fragme	105
22E-28NL1	lm							indeterminate	vert		2	fragme	9
22E-28NL1	Mammalia								tooth		1	fragme	0
22E-28NL1	lm							indeterminate	carpal/tarsal		1	<1/4	2
22E-28NL1	lm							indeterminate	long bone		13	fragme	9
22E-28NL1	lm							indeterminate	indeterminate		7	fragme	5
22E-28NL1	mm							indeterminate	long bone		87	fragme	16
22E-28NL1	mm							indeterminate	rib/spine		19	fragme	4
22E-28NL1	mm							indeterminate	indeterminate		14	fragme	5
22E-28NL1	unident							indeterminate	indeterminate			fragme	40
22E-28NL1	lm							indeterminate	long bone		4	fragme	9
22E-28NL1	lm							indeterminate	indeterminate		1	fragme	1
22E-28NL1	Mammalia								tooth		1	fragme	1
22E-28NL1	lm/mm							indeterminate	rib/spine		1	fragme	0
22E-28NL1	mm							indeterminate	long bone		8	fragme	2
22E-28NL1	mm							indeterminate	rib/spine		3	fragme	0
22E-28NL2	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		2	fragme	0
22E-28NL2	Reptilia	Testudines				turtle		fused	vert		1	1/4	0
22E-28NL2	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		3	fragme	2
22E-28NL2	Mammalia								tooth		18	fragme	8
22E-28NL2	lm						Distal e	unfused	phalanx		1	1/2	2
22E-28NL2	lm						Distal	indeterminate	phalanx		1	<1/4	1
22E-28NL2	lm							indeterminate	long bone		45	fragme	42
22E-28NL2	lm							indeterminate	rib/spine		5	fragme	3
22E-28NL2	lm							indeterminate	indeterminate		17	fragme	23
22E-28NL2	mm							indeterminate	long bone		164	fragme	70
22E-28NL2	mm							indeterminate	rib/spine		51	fragme	21
22E-28NL2	unident							indeterminate	indeterminate			fragme	126
22E-28NL3	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		2	fragme	2
22E-28NL3	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			M3	right	1	3/4	11

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-28NL1		long bone	b=2, c=20
22E-28NL1		indeterminate	c=8
22E-28NL1		long bone	c=119
22E-28NL1		rib/spine	c=15
22E-28NL1		indeterminate	c=18
22E-28NL1		indeterminate	
22E-28NL1		vert	c=1
22E-28NL1		tooth	
22E-28NL1		carpal/tarsal	c=1
22E-28NL1		long bone	c=7
22E-28NL1		indeterminate	c=4
22E-28NL1		long bone	b=4, c=54
22E-28NL1		rib/spine	b=2, c=16
22E-28NL1		indeterminate	c=9
22E-28NL1		indeterminate	
22E-28NL1		long bone	pc=3
22E-28NL1		indeterminate	
22E-28NL1		tooth	
22E-28NL1		rib/spine	
22E-28NL1		long bone	b=5
22E-28NL1		rib/spine	b=3
22E-28NL2	softshell turtle	carapace	b=1, c=1
22E-28NL2	turtle	vert	
22E-28NL2	softshell turtle	carapace	b=1, c=2
22E-28NL2		tooth	b=1
22E-28NL2		phalanx	
22E-28NL2		phalanx	cut=1
22E-28NL2		long bone	b=5, c=6
22E-28NL2		rib/spine	b=1, c=2
22E-28NL2		indeterminate	b=3, c=4
22E-28NL2		long bone	b=22, c=42
22E-28NL2		rib/spine	b=3, c=27
22E-28NL2		indeterminate	
22E-28NL3	softshell turtle	carapace	c=2
22E-28NL3	zebu	M3	dev=k

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-28NL3	Reptilia	Testudines				turtle		fused	carapace		2	fragme	2
22E-28NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd phalanx	right	1	3/4	5
22E-28NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Lateral Malleolus		1	comple	5
22E-28NL3	Mammalia	Artiodactyla				M artiodactyl	Distal	fused	metapodial		1	<1/4	1
22E-28NL3	mm						Proxim	indeterminate	femur		1	1/2	1
22E-28NL3	mm							fused	costal cartilage		4	fragme	2
22E-28NL3	Mammalia								tooth		26	fragme	10
22E-28NL3	lm/mm							indeterminate	vert		1	<1/4	1
22E-28NL3	lm							fused	sesamoid		1	comple	1
22E-28NL3	lm							indeterminate	long bone		53	fragme	64
22E-28NL3	lm							indeterminate	rib/spine		14	fragme	20
22E-28NL3	lm							indeterminate	indeterminate		28	fragme	29
22E-28NL3	mm							indeterminate	long bone		72	fragme	66
22E-28NL3	mm							indeterminate	rib/spine		54	fragme	14
22E-28NL3	mm							indeterminate	indeterminate		24	fragme	13
22E-28NL3	unident							indeterminate	indeterminate			fragme	129
22E-28NL4	lm							fused	sesamoid		1	comple	2
22E-28NL4	lm							unfused	long bone		1	fragme	0
22E-28NL4	lm							indeterminate	long bone		6	fragme	12
22E-28NL4	lm							indeterminate	rib/spine		2	fragme	2
22E-28NL4	lm							indeterminate	indeterminate		11	fragme	7
22E-28NL4	mm							indeterminate	long bone		19	fragme	5
22E-28NL4	mm							indeterminate	rib/spine		3	fragme	0
22E-28NL4	mm							indeterminate	indeterminate		3	fragme	1
22E-28NL4	unident							indeterminate	indeterminate			fragme	8
22E-28NL5	mm						Distal	indeterminate	tibia		1	1/4	3
22E-28NL5	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	2
22E-28NL5	Osteichthyes					fish		fused	otolith		1	comple	0
22E-28NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar	lower	1	comple	20
22E-28NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			M2		1	comple	2
22E-28NL5	Osteichthyes					fish		indeterminate	vert		1	comple	0
22E-28NL5	Reptilia	Sauria				lizard		fused	vert		1	comple	0
22E-28NL5	Mammalia	Rodentia				rat/mouse		fused	mandible	left	1	comple	0
22E-28NL5	sm							indeterminate	long bone		4	fragme	1
22E-28NL5	Mammalia								antler		2	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-28NL3	turtle	carapace	b=1
22E-28NL3	zebu/buffalo	2nd phalanx	c=1
22E-28NL3	zebu/buffalo	Lateral Malleolus	
22E-28NL3	M artiodactyl	metapodial	
22E-28NL3		femur	
22E-28NL3		costal cartilag	pc=1
22E-28NL3		tooth	b=5
22E-28NL3		vert	
22E-28NL3		sesamoid	
22E-28NL3		long bone	pc=13, c=5
22E-28NL3		rib/spine	b=1
22E-28NL3		indeterminate	b=3, pc=1
22E-28NL3		long bone	b=7, pc=36, c=11
22E-28NL3		rib/spine	b=11, pc=4, c=7
22E-28NL3		indeterminate	b=4
22E-28NL3		indeterminate	
22E-28NL4		sesamoid	
22E-28NL4		long bone	dev=fetal/newborn, cut=1
22E-28NL4		long bone	
22E-28NL4		rib/spine	b=1
22E-28NL4		indeterminate	
22E-28NL4		long bone	b=3
22E-28NL4		rib/spine	
22E-28NL4		indeterminate	
22E-28NL4		indeterminate	
22E-28NL5		tibia	hack=1
22E-28NL5	softshell turtle	carapace	
22E-28NL5	fish	otolith	
22E-28NL5	zebu/buffalo	molar	dev=k
22E-28NL5	sheep/goat	M2	dev=f
22E-28NL5	fish	vert	diam = 5.15
22E-28NL5	lizard	vert	
22E-28NL5	rat/mouse	mandible	
22E-28NL5		long bone	b=2
22E-28NL5		antler	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
22E-28NL5	lm							indeterminate	vert		4	fragme	18
22E-28NL5	lm							unfused	vert		3	fragme	13
22E-28NL5	Mammalia								tooth		4	fragme	2
22E-28NL5	lm							indeterminate	astragalus		1	1/4	2
22E-28NL5	mm						Distal	indeterminate	phalanx		1	1/4	0
22E-28NL5	mm						Proxim	indeterminate	phalanx		1	1/2	1
22E-28NL5	lm						Distal	indeterminate	phalanx		2	1/4	4
22E-28NL5	lm							indeterminate	carpal/tarsal		1	fragme	3
22E-28NL5	lm							fused	sesamoid		1	comple	3
22E-28NL5	lm						Proxim	unfused	humerus		1	1/4	97
22E-28NL5	lm							indeterminate	long bone		1	fragme	2
22E-28NL5	lm							indeterminate	ilium		1	1/2	23
22E-28NL5	lm							indeterminate	skull		5	fragme	9
22E-28NL5	lm/mm							indeterminate	skull		4	fragme	4
22E-28NL5	mm							indeterminate	mandible		1	fragme	2
22E-28NL5	lm							indeterminate	long bone		38	fragme	103
22E-28NL5	lm							indeterminate	rib/spine		9	fragme	18
22E-28NL5	lm							indeterminate	rib		3	fragme	15
22E-28NL5	lm							indeterminate	indeterminate		38	fragme	91
22E-28NL5	mm							indeterminate	long bone		117	fragme	56
22E-28NL5	mm							indeterminate	rib/spine		22	fragme	9
22E-28NL5	mm							indeterminate	indeterminate		22	fragme	16
22E-28NL5	unident							indeterminate	indeterminate			fragme	115
22E-28NL6	lm							indeterminate	long bone		38	fragme	97
22E-28NL6	lm						Proxim	fused	femur		1	1/4	69
22E-28NL6	Mammalia	Artiodactyla	Bovidae			L bovid		fused	astragalus		1	3/4	63
22E-28NL6	lm							fused	rib/spine		8	fragme	34
22E-28NL6	lm						Proxim	fused	scapula		1	1/4	8
22E-28NL6	lm						blade	fused	scapula		2	1/2	50
22E-28NL6	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			M3	lower	1	3/4	9
22E-28NL6	mm							indeterminate	long bone		63	fragme	42
22E-28NL6	mm							indeterminate	indeterminate		110	fragme	82
22E-28NL6	lm							indeterminate	skull		10	fragme	54
22E-28NL6	Reptilia					reptile		indeterminate	vert		1	1/2	2
22E-28NL6	sm							indeterminate	vert		1	1/2	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-28NL5		vert	
22E-28NL5		vert	
22E-28NL5		tooth	
22E-28NL5		astragalus	
22E-28NL5		phalanx	
22E-28NL5		phalanx	Bp 11.84
22E-28NL5		phalanx	
22E-28NL5		carpal/tarsal	hack=1
22E-28NL5		sesamoid	
22E-28NL5		humerus	cut=1
22E-28NL5		long bone	w=1
22E-28NL5		ilium	pc=1
22E-28NL5		skull	c=1
22E-28NL5		skull	
22E-28NL5		mandible	
22E-28NL5		long bone	b=4, c=5
22E-28NL5		rib/spine	
22E-28NL5		rib	
22E-28NL5		indeterminate	b=4, pc=1
22E-28NL5		long bone	b=23, c=11
22E-28NL5		rib/spine	b=3, c=4
22E-28NL5		indeterminate	c=6
22E-28NL5		indeterminate	
22E-28NL6		long bone	b=3, c=1
22E-28NL6		femur	
22E-28NL6	L bovid	astragalus	GL 72.49
22E-28NL6		rib/spine	b=1
22E-28NL6		scapula	
22E-28NL6		scapula	
22E-28NL6	zebu/buffalo	M3	L 36.09
22E-28NL6		long bone	b=7, pc=8, c=3
22E-28NL6		indeterminate	b=13, c=2
22E-28NL6		skull	c=1
22E-28NL6	reptile	vert	
22E-28NL6		vert	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
22E-28NL6	sm							indeterminate	long bone		3	fragme	1
22E-28NL6	sm							indeterminate	skull		1	fragme	0
22E-28NL6	Aves					bird		indeterminate	long bone		4	fragme	5
22E-28NL6	mm							indeterminate	rib/spine		26	fragme	13
22E-28NL6	lm							indeterminate	vert		1	1/4	7
22E-28NL6	Mammalia								antler		3	fragme	3
22E-28NL6	lm							indeterminate	indeterminate		29	fragme	83
22E-28NL6	Mammalia	Rodentia				mouse/squirrel		fused	maxilla		1	fragme	0
22E-28NL6	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		unerupted	molar		1	comple	0
22E-28NL6	Mammalia								tooth		7	fragme	3
22E-28NL6	unident							indeterminate	indeterminate			fragme	116
22E-28NL6	Osteichthyes					fish		fused	otolith		1	comple	0
22E-28NL6	Mammalia	Artiodactyla	Bovidae			bovid	Proxim	fused	1st phalanx		1	1/2	18
22E-28NL6	lm						Proxim	fused	humerus		1	1/4	88
22E-28NL6	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	central tarsal		1	comple	26
22E-28NL6	Mammalia								antler		2	fragme	3
22E-28NL6	mm/sm						Distal	fused	phalanx		1	1/2	0
22E-28NL6	sm						Distal	fused	femur		1	1/2	0
22E-28NL6	Mammalia	Artiodactyla				S artiodactyl	shaft	fused	metapodial		1	fragme	0
22E-28NL6	Reptilia	Sauria				lizard		fused	vert		2	fragme	1
22E-28NL6	Mammalia								tooth		8	fragme	3
22E-28NL6	mm							fused	mandible	left	1	1/4	6
22E-28NL6	lm							indeterminate	skull		3	fragme	21
22E-28NL6	lm							indeterminate	long bone		44	fragme	80
22E-28NL6	lm							indeterminate	rib/spine		7	fragme	30
22E-28NL6	lm							indeterminate	vert		5	fragme	45
22E-28NL6	lm							indeterminate	indeterminate		17	fragme	58
22E-28NL6	mm							indeterminate	long bone		76	fragme	44
22E-28NL6	Mammalia	Artiodactyla				M artiodactyl		fused	metapodial		9	fragme	11
22E-28NL6	mm							indeterminate	rib/spine		20	fragme	13
22E-28NL6	mm							indeterminate	skull		3	fragme	2
22E-28NL6	mm							indeterminate	indeterminate		30	fragme	25
22E-28NL6	Aves					bird		indeterminate	long bone		2	fragme	1
22E-28NL6	unident							indeterminate	indeterminate			fragme	44
22E-28NL7	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Proxim	unfused	ulna		1	3/4	7

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-28NL6		long bone	
22E-28NL6		skull	
22E-28NL6	bird	long bone	pc=1
22E-28NL6		rib/spine	b=6, pc=3, c=3
22E-28NL6		vert	
22E-28NL6		antler	
22E-28NL6		indeterminate	pc=4
22E-28NL6	mouse/squirrel	maxilla	
22E-28NL6	sheep/goat/de	molar	
22E-28NL6		tooth	
22E-28NL6		indeterminate	
22E-28NL6	fish	otolith	sesame-seed shaped
22E-28NL6	bovid	1st phalanx	Bp 28.76
22E-28NL6		humerus	
22E-28NL6	zebu/buffalo	central tarsal	
22E-28NL6		antler	
22E-28NL6		phalanx	
22E-28NL6		femur	
22E-28NL6	S artiodactyl	metapodial	c=1
22E-28NL6	lizard	vert	
22E-28NL6		tooth	
22E-28NL6		mandible	b=1
22E-28NL6		skull	
22E-28NL6		long bone	b=3
22E-28NL6		rib/spine	b=1
22E-28NL6		vert	
22E-28NL6		indeterminate	pc=1
22E-28NL6		long bone	b=11, c=6
22E-28NL6	M artiodactyl	metapodial	b=3, c=5
22E-28NL6		rib/spine	b=4, pc=1
22E-28NL6		skull	
22E-28NL6		indeterminate	b=3
22E-28NL6	bird	long bone	
22E-28NL6		indeterminate	
22E-28NL7	sheep/goat	ulna	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
22E-28NL7	Mammalia	Carnivora				carnivore		indeterminate	mandible	left	1	1/4	2
22E-28NL7	Mammalia	Rodentia				rat/mouse		indeterminate	mandible	left	1	fragme	0
22E-28NL7	lm							indeterminate	scapula		2	1/4	32
22E-28NL7	lm							indeterminate	acetabulum		1	1/2	28
22E-28NL7	lm							indeterminate	scapula		2	1/2	59
22E-28NL7	lm						Distal	indeterminate	phalanx		1	1/2	7
22E-28NL7	mm							fused	costal cartilage		1	fragme	2
22E-28NL7	Mammalia								antler		1	fragme	1
22E-28NL7	Mammalia								tooth		3	fragme	1
22E-28NL7	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		unerupted	molar		1	fragme	0
22E-28NL7	mm							indeterminate	vert, caudal		1	1/2	0
22E-28NL7	mm						centrur	unfused	vert		1	fragme	0
22E-28NL7	sm							indeterminate	long bone		3	fragme	0
22E-28NL7	Aves					bird		indeterminate	long bone		1	fragme	1
22E-28NL7	lm							indeterminate	calcaneus		2	fragme	26
22E-28NL7	lm							indeterminate	vert		2	<1/4	13
22E-28NL7	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	carpal 4	right	1	comple	6
22E-28NL7	lm							fused	carpal/tarsal		1	1/4	4
22E-28NL7	lm							indeterminate	innominate		8	fragme	104
22E-28NL7	lm							indeterminate	skull		9	fragme	16
22E-28NL7	lm							indeterminate	long bone		47	fragme	146
22E-28NL7	lm							indeterminate	rib/spine		20	fragme	116
22E-28NL7	lm							indeterminate	indeterminate		28	fragme	83
22E-28NL7	mm							indeterminate	long bone		61	fragme	38
22E-28NL7	mm							indeterminate	rib/spine		17	fragme	13
22E-28NL7	mm							indeterminate	indeterminate		18	fragme	17
22E-28NL7	unident							indeterminate	indeterminate			fragme	91
22E-28NL7	Aves	Falconiformes				bird of prey		fused	4th phalanx		1	comple	0
22E-28NL7	Reptilia	Sauria				lizard	Distal	fused	humerus		1	3/4	1
22E-28NL7	Reptilia	Testudines	Trionychidae	Aspideretes		softshell turtle		fused	carapace		1	fragme	1
22E-28NL7	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare	Distal	fused	femur		1	1/2	0
22E-28NL7	Mammalia	Rodentia				rat/mouse		fused	maxilla	left	1	comple	0
22E-28NL7	Mammalia	Rodentia				rat/mouse		fused	vert		1	comple	0
22E-28NL7	sm							indeterminate	ilium		1	fragme	0
22E-28NL7	sm							indeterminate	indeterminate		2	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-28NL7	carnivore	mandible	w/ P4 & P3
22E-28NL7	rat/mouse	mandible	
22E-28NL7		scapula	
22E-28NL7		acetabulum	
22E-28NL7		scapula	
22E-28NL7		phalanx	
22E-28NL7		costal cartilage	
22E-28NL7		antler	
22E-28NL7		tooth	
22E-28NL7	sheep/goat/de	molar	
22E-28NL7		vert, caudal	pc=1
22E-28NL7		vert	
22E-28NL7		long bone	
22E-28NL7	bird	long bone	sf=1
22E-28NL7		calcaneus	
22E-28NL7		vert	
22E-28NL7	zebu/buffalo	carpal 4	
22E-28NL7		carpal/tarsal	
22E-28NL7		innominate	
22E-28NL7		skull	
22E-28NL7		long bone	
22E-28NL7		rib/spine	
22E-28NL7		indeterminate	c=3
22E-28NL7		long bone	c=10, c=2
22E-28NL7		rib/spine	b=2
22E-28NL7		indeterminate	b=4
22E-28NL7		indeterminate	
22E-28NL7	bird of prey	4th phalanx	
22E-28NL7	lizard	humerus	
22E-28NL7	softshell turtle	carapace	c=1
22E-28NL7	Indian Hare	femur	Bd 6.30
22E-28NL7	rat/mouse	maxilla	
22E-28NL7	rat/mouse	vert	
22E-28NL7		ilium	
22E-28NL7		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
22E-28NL7	sm						Proxim	indeterminate	tibia		1	fragme	0
22E-28NL7	Mammalia	Carnivora	Canidae	Canis		canis sp.		fused	3rd Phalanx		2	comple	0
22E-28NL7	Mammalia							indeterminate	antler		2	fragme	4
22E-28NL7	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	astragalus	left	1	3/4	54
22E-28NL7	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	patella	right	1	comple	31
22E-28NL7	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	1st phalanx	right	1	3/4	18
22E-28NL7	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	fused	2nd phalanx	right	1	1/2	7
22E-28NL7	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	2nd phalanx		1	comple	1
22E-28NL7	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		unerupted	molar	lower	1	comple	2
22E-28NL7	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	1st phalanx		1	comple	2
22E-28NL7	lm						Distal	indeterminate	phalanx		1	1/4	5
22E-28NL7	lm							indeterminate	3rd Phalanx		1	1/4	5
22E-28NL7	lm							indeterminate	carpal/tarsal		2	1/4	8
22E-28NL7	lm							indeterminate	accessory carpal		2	comple	7
22E-28NL7	lm							indeterminate	costal cartilage		1	fragme	4
22E-28NL7	lm							indeterminate	ilium		1	1/4	31
22E-28NL7	Mammalia								tooth		6	fragme	3
22E-28NL7	Aves/Reptilia					bird/reptile		indeterminate	indeterminate		7	fragme	3
22E-28NL7	Aves					bird		indeterminate	long bone		1	fragme	0
22E-28NL7	lm/mm							unfused	vert		1	fragme	1
22E-28NL7	lm/mm							indeterminate	vert		4	fragme	8
22E-28NL7	lm/mm							indeterminate	skull		10	fragme	13
22E-28NL7	lm							indeterminate	long bone		36	fragme	115
22E-28NL7	lm							indeterminate	rib/spine		32	fragme	97
22E-28NL7	lm							indeterminate	indeterminate		42	fragme	84
22E-28NL7	mm							indeterminate	long bone		81	fragme	52
22E-28NL7	mm							indeterminate	rib/spine		15	fragme	9
22E-28NL7	mm							indeterminate	indeterminate		20	fragme	14
22E-28NL7	unident							indeterminate	indeterminate			fragme	145
22E-28NL7	lm							indeterminate	indeterminate		3	fragme	22
22E-28NL7	lm							indeterminate	long bone		1	fragme	1
22E-28NL7	lm							indeterminate	rib/spine		2	fragme	1
22E-28NL7	mm							indeterminate	long bone		10	fragme	4
22E-28NL7	mm							indeterminate	rib/spine		3	fragme	0
22E-28NL7	unident							indeterminate	indeterminate			fragme	5

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-28NL7		tibia	
22E-28NL7	canis sp.	3rd Phalanx	
22E-28NL7		antler	
22E-28NL7	zebu	astragalus	GLm 68.38
22E-28NL7	zebu	patella	GB 55.15, GL 60.50
22E-28NL7	zebu/buffalo	1st phalanx	Bp 28.59
22E-28NL7	zebu/buffalo	2nd phalanx	Bp 26.20
22E-28NL7	goat	2nd phalanx	GL 27.80, Bp 11.10, Bd 8.91
22E-28NL7	sheep/goat/de	molar	
22E-28NL7	pig	1st phalanx	GL 24.08, Bp 10.59, Bd 11.79
22E-28NL7		phalanx	
22E-28NL7		3rd Phalanx	
22E-28NL7		carpal/tarsal	
22E-28NL7		accessory carpal	
22E-28NL7		costal cartilage	
22E-28NL7		ilium	
22E-28NL7		tooth	
22E-28NL7	bird/reptile	indeterminate	
22E-28NL7	bird	long bone	
22E-28NL7		vert	
22E-28NL7		vert	
22E-28NL7		skull	
22E-28NL7		long bone	b=4, pc=1, c=3
22E-28NL7		rib/spine	b=1, pc=1
22E-28NL7		indeterminate	b=5, c=3
22E-28NL7		long bone	b=17, c=12
22E-28NL7		rib/spine	b=5, pc=2
22E-28NL7		indeterminate	b=3
22E-28NL7		indeterminate	
22E-28NL7		indeterminate	pc=2
22E-28NL7		long bone	
22E-28NL7		rib/spine	
22E-28NL7		long bone	b=3
22E-28NL7		rib/spine	b=1
22E-28NL7		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-28NL8	Aves	Falconiforme	Accipitridae	cf. Aquila		eagle	Distal	fused	tarsometatarsus		1	fragme	0
22E-28NL8	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	astragalus		1	3/4	57
22E-28NL8	Mammalia			Antilope	cervicapra	blackbuck		fused	3rd Phalanx		1	comple	2
22E-28NL8	Mammalia			Antilope	cervicapra	blackbuck	Distal	fused	metatarsal		1	1/2	4
22E-28NL8	Mammalia	Artiodactyla				M artiodactyl	Proxim	fused	metatarsal		1	1/4	3
22E-28NL8	Mammalia	Artiodactyla				M artiodactyl	shaft	fused	metapodial		1	<1/4	0
22E-28NL8	lm							fused	sesamoid		3	comple	5
22E-28NL8	Aves					bird		fused	phalanx		1	comple	0
22E-28NL8	mm							fused	acetabulum		1	1/4	7
22E-28NL8	Mammalia								antler		2	fragme	2
22E-28NL8	Mammalia								tooth		6	fragme	11
22E-28NL8	lm							indeterminate	skull		3	fragme	18
22E-28NL8	lm							indeterminate	vert		3	fragme	23
22E-28NL8	mm							indeterminate	vert		1	fragme	2
22E-28NL8	mm							unfused	vert		1	fragme	1
22E-28NL8	lm							indeterminate	long bone		14	fragme	40
22E-28NL8	lm							indeterminate	rib/spine		12	fragme	84
22E-28NL8	lm							unfused	rib/spine		2	fragme	14
22E-28NL8	lm							indeterminate	indeterminate		17	fragme	63
22E-28NL8	sm							indeterminate	long bone		2	fragme	0
22E-28NL8	Reptilia					reptile		indeterminate	vert		1	1/2	0
22E-28NL8	Aves					bird		indeterminate	indeterminate		5	fragme	2
22E-28NL8	mm							indeterminate	long bone		73	fragme	57
22E-28NL8	mm							indeterminate	rib/spine		50	fragme	35
22E-28NL8	mm							indeterminate	skull		18	fragme	26
22E-28NL8	mm							indeterminate	indeterminate		38	fragme	34
22E-28NL8	unident							indeterminate	indeterminate			fragme	106
22E-28NL9	Mammalia	Artiodactyla	Cervidae			deer sp.			antler burr		1	comple	30
22E-28NL9	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			molar	upper	1	comple	15
22E-28NL9	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	mandible	left	1	1/2	27
22E-28NL9	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat			P4	left	1	complete	
22E-28NL9	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat			M1	left	1	complete	
22E-28NL9	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat			M2	left	1	complete	
22E-28NL9	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat			M3	left	1	complete	
22E-28NL9	lm						Proxim	unfused	phalanx		1	1/2	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-28NL8	eagle	tarsometatars	Bd 9.38
22E-28NL8	zebu	astragalus	GLm 63.33 Bd 41.21 D1 35.83
22E-28NL8	blackbuck	3rd Phalanx	DLS 34.58 Ld 27.92 MBS 11.48
22E-28NL8	blackbuck	metatarsal	Bd 23.72
22E-28NL8	M artiodactyl	metatarsal	
22E-28NL8	M artiodactyl	metapodial	
22E-28NL8		sesamoid	pc=2
22E-28NL8	bird	phalanx	
22E-28NL8		acetabulum	
22E-28NL8		antler	
22E-28NL8		tooth	b=4
22E-28NL8		skull	b=2
22E-28NL8		vert	cut=1
22E-28NL8		vert	
22E-28NL8		vert	
22E-28NL8		long bone	
22E-28NL8		rib/spine	rg=1
22E-28NL8		rib/spine	
22E-28NL8		indeterminate	c=1
22E-28NL8		long bone	
22E-28NL8	reptile	vert	
22E-28NL8	bird	indeterminate	
22E-28NL8		long bone	b=10, c=19
22E-28NL8		rib/spine	b=4, c=7
22E-28NL8		skull	b=2
22E-28NL8		indeterminate	b=7, c=5
22E-28NL8		indeterminate	
22E-28NL9	deer sp.	antler burr	pc=1
22E-28NL9	zebu/buffalo	molar	dev=adult
22E-28NL9	goat	mandible	w/ M3 - P4; length molar row = 51.82
22E-28NL9	goat	P4	dev=j
22E-28NL9	goat	M1	dev=j
22E-28NL9	goat	M2	dev=h
22E-28NL9	goat	M3	dev=h, L = 25.44, B = 9.39
22E-28NL9		phalanx	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
22E-28NL9	lm						Proxim	fused	phalanx		1	1/4	4
22E-28NL9	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx		1	1/4	4
22E-28NL9	Mammalia	Artiodactyla				L artiodactyl	Distal	fused	metapodial		1	<1/4	4
22E-28NL9	mm						Distal	fused	phalanx		1	1/4	0
22E-28NL9	lm							fused	sesamoid		2	comple	6
22E-28NL9	Mammalia								tooth		21	fragme	19
22E-28NL9	lm							indeterminate	vert		3	fragme	9
22E-28NL9	lm							unfused	vert		1	fragme	3
22E-28NL9	mm							indeterminate	vert		2	fragme	5
22E-28NL9	mm							unfused	vert		1	fragme	2
22E-28NL9	lm							indeterminate	skull		14	fragme	89
22E-28NL9	lm							indeterminate	long bone		43	fragme	190
22E-28NL9	lm							indeterminate	rib/spine		2	fragme	16
22E-28NL9	lm							indeterminate	indeterminate		23	fragme	88
22E-28NL9	mm							indeterminate	long bone		155	fragme	111
22E-28NL9	mm							indeterminate	rib/spine		33	fragme	26
22E-28NL9	mm							indeterminate	skull		13	fragme	15
22E-28NL9	mm							indeterminate	indeterminate		214	fragme	148
22E-28NL9	Aves					bird		indeterminate	long bone		9	fragme	10
22E-28NL9	sm/bird					sm/bird		indeterminate	indeterminate		4	fragme	1
22E-28NL9	sm							indeterminate	long bone		1	fragme	0
22E-28NL9	Osteichthyes					fish		fused	vert		1	fragme	0
22E-28NL9	Reptilia	Sauria				lizard		fused	mandible		1	fragme	0
22E-28NL9	unident							indeterminate	indeterminate			fragme	183
52E-86NF1	Mammalia							Indeterminate	long bone		2	fragme	0
52E-86NL0	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	fused	Metacarpal	Left	1	<1/4	8
52E-86NL0	lm							Indeterminate	long bone		3	fragme	6
52E-86NL0	lm							indeterminate	indeterminate		1	fragme	4
52E-86NL0	mm							indeterminate	long bone		1	fragme	0
52E-86NL0	mm							indeterminate	long bone		1	fragme	0
52E-86NL0	mm							indeterminate	rib/spine		1	fragme	0
52E-86NL0	sm							indeterminate	long bone		1	fragme	0
52E-86NL1	lm							indeterminate	long bone		14	fragme	10
52E-86NL1	lm							indeterminate	rib/spine		3	fragme	1
52E-86NL1	lm							indeterminate	indeterminate		3	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
22E-28NL9		phalanx	
22E-28NL9	zebu/buffalo	3rd Phalanx	
22E-28NL9	L artiodactyl	metapodial	
22E-28NL9		phalanx	b=1
22E-28NL9		sesamoid	
22E-28NL9		tooth	
22E-28NL9		vert	
22E-28NL9		vert	
22E-28NL9		vert	
22E-28NL9		vert	
22E-28NL9		skull	
22E-28NL9		long bone	
22E-28NL9		rib/spine	pc=1
22E-28NL9		indeterminate	b=4, pc=3
22E-28NL9		long bone	b=14, pc=4, c=17
22E-28NL9		rib/spine	b=7, pc=2, c=4
22E-28NL9		skull	
22E-28NL9		indeterminate	b=20, c=16
22E-28NL9	bird	long bone	b=3
22E-28NL9	sm/bird	indeterminate	
22E-28NL9		long bone	
22E-28NL9	fish	vert	diam = 4.3
22E-28NL9	lizard	mandible	
22E-28NL9		indeterminate	
52E-86NF1		long bone	
52E-86NL0	zebu	Metacarpal	c=1
52E-86NL0		long bone	b=1, c=2
52E-86NL0		indeterminate	
52E-86NL0		long bone	c=1
52E-86NL0		long bone	c=1
52E-86NL0		rib/spine	c=1
52E-86NL0		long bone	c=1
52E-86NL1		long bone	b=2, c=3
52E-86NL1		rib/spine	c=1
52E-86NL1		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
52E-86NL1	mm							indeterminate	indeterminate		1	fragme	0
52E-86NL1	mm							indeterminate	rib/spine		2	fragme	1
52E-86NL1	mm							indeterminate	long bone		25	fragme	6
52E-86NL1	unident							indeterminate	indeterminate			fragme	5
52E-86NL10	lm						Proxim	Unfused	Rib		1	<1/4	8
52E-86NL10	Mammalia	Artiodactyla	Cervidae			deer sp.			Antler		1	fragme	2
52E-86NL10	lm							Indeterminate	Mandible		1	<1/4	7
52E-86NL10	lm							indeterminate	long bone		6	fragme	9
52E-86NL10	lm							indeterminate	rib/spine		1	fragme	0
52E-86NL10	lm							Indeterminate	indeterminate		2	fragme	2
52E-86NL10	mm							Indeterminate	long bone		10	fragme	9
52E-86NL10	mm							indeterminate	rib/spine		3	fragme	0
52E-86NL10	mm							indeterminate	indeterminate		6	fragme	3
52E-86NL10	unident							indeterminate	indeterminate			fragme	5
52E-86NL10	Aves					L bird		indeterminate	long bone		2	fragme	1
52E-86NL11	Aves					bird		indeterminate	long bone		8	fragme	3
52E-86NL11	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	vert, caudal		1	Comple	5
52E-86NL11	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	Indeterminate	2nd Phalanx		1	<1/4	3
52E-86NL11	Mammalia	Artiodactyla	Cervidae			deer sp.	Distal	Indeterminate	1st Phalanx		1	1/2 - 3/	3
52E-86NL11	Mammalia	Artiodactyla	Cervidae			deer sp.			Antler		1	fragme	5
52E-86NL11	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Upper		Molar		1	Comple	3
52E-86NL11	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Proxim	Indeterminate	1st Phalanx		1	<1/4	1
52E-86NL11	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer			Tooth		3	fragme	1
52E-86NL11	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Indeterminate	Calcaneus		1	1/4 - 1/	6
52E-86NL11	lm								Tooth		2	fragme	1
52E-86NL11	lm							Indeterminate	long bone		11	fragme	29
52E-86NL11	lm							Indeterminate	indeterminate		11	fragme	16
52E-86NL11	lm							Indeterminate	rib/spine		2	fragme	1
52E-86NL11	mm							Indeterminate	indeterminate		15	fragme	19
52E-86NL11	mm							Indeterminate	long bone		29	fragme	18
52E-86NL11	mm							Indeterminate	rib/spine		35	fragme	12
52E-86NL11	mm							Indeterminate	Carpal/tarsal		1	fragme	0
52E-86NL11	sm							Indeterminate	long bone		9	fragme	4
52E-86NL11	Mammalia	Rodentia				rat/mouse		Fused	Innominate	Right	1	1/2 - 3/	0
52E-86NL11	Reptilia/Amphibia					reptile/amphibian		Indeterminate	long bone		3	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
52E-86NL1		indeterminate	
52E-86NL1		rib/spine	pc=1
52E-86NL1		long bone	b=8, c=1
52E-86NL1		indeterminate	b=7, c=2
52E-86NL10		Rib	
52E-86NL10	deer sp.	Antler	rg=1
52E-86NL10		Mandible	cheek area, no teeth
52E-86NL10		long bone	b=4
52E-86NL10		rib/spine	b=1
52E-86NL10		indeterminate	
52E-86NL10		long bone	b=8
52E-86NL10		rib/spine	b=1
52E-86NL10		indeterminate	
52E-86NL10		indeterminate	b=2
52E-86NL10	L bird	long bone	
52E-86NL11	bird	long bone	
52E-86NL11	zebu	vert, caudal	
52E-86NL11	zebu	2nd Phalanx	
52E-86NL11	deer sp.	1st Phalanx	
52E-86NL11	deer sp.	Antler	beam fragment
52E-86NL11	sheep/goat	Molar	
52E-86NL11	sheep/goat	1st Phalanx	
52E-86NL11	sheep/goat/de	Tooth	b=1
52E-86NL11	sheep/goat/de	Calcaneus	
52E-86NL11		Tooth	
52E-86NL11		long bone	b=6
52E-86NL11		indeterminate	b=1
52E-86NL11		rib/spine	
52E-86NL11		indeterminate	b=4, c=3
52E-86NL11		long bone	b=8
52E-86NL11		rib/spine	b=11, c=3
52E-86NL11		Carpal/tarsal	b=1
52E-86NL11		long bone	b=4
52E-86NL11	rat/mouse	Innominate	
52E-86NL11	reptile/amphibi	long bone	mineralized

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
52E-86NL11	mm								Tooth root		4	fragme	0
52E-86NL11	unident							Indeterminate	indeterminate			fragme	36
52E-86NL12	Aves	Piciformes	Picidae	Dendrocopos		woodpecker-	Proxim	fused	Coracoid	Left	1	3/4+	0
52E-86NL12	Aves					M bird		fused	2nd Phalanx	Hind	1	Comple	0
52E-86NL12	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	Unfused	Tibia		1	<1/4	17
52E-86NL12	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	Fused	2nd Phalanx		1	1/4 - 1/	8
52E-86NL12	lm								Tooth		4	fragme	3
52E-86NL12	lm							indeterminate	long bone		10	fragme	49
52E-86NL12	lm							indeterminate	rib/spine		9	fragme	18
52E-86NL12	lm							indeterminate	indeterminate		8	fragme	18
52E-86NL12	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Indeterminate	Femur		1	<1/4	5
52E-86NL12	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Unfused	Radius		1	fragme	3
52E-86NL12	Mammalia	Artiodactyla	Suidae	Sus		pig	Lower		Molar		1	Comple	1
52E-86NL12	Mammalia	Insectivora	Soricidae	Suncus		shrew		fused	Mandible	Right	1	Comple	0
52E-86NL12	mm								Tooth		1	fragme	1
52E-86NL12	mm						Distal	indeterminate	Femur		1	fragme	2
52E-86NL12	mm							indeterminate	Mandible		1	fragme	1
52E-86NL12	mm							fused	Petris Temporal		1	fragme	1
52E-86NL12	mm							indeterminate	long bone		29	fragme	27
52E-86NL12	mm							Indeterminate	rib/spine		15	fragme	4
52E-86NL12	mm							Indeterminate	indeterminate		16	fragme	13
52E-86NL12	Mammalia	Rodentia				rat/mouse	Proxim	Fusing	Tibia	Left	1	fragme	0
52E-86NL12	Mammalia	Rodentia				rat/mouse	Distal	Unfused	Femur		1	fragme	0
52E-86NL12	Mammalia	Rodentia				rat/mouse	Distal	fused	Tibia		1	3/4+	0
52E-86NL12	Mammalia							Unfused	1st Phalanx		1	fragme	0
52E-86NL12	sm/bird					sm/bird		Indeterminate	long bone		19	fragme	7
52E-86NL12	sm/bird					sm/bird	Arch	indeterminate	Vert		1	fragme	0
52E-86NL12	sm							indeterminate	rib/spine		4	fragme	0
52E-86NL12	unident							indeterminate	indeterminate			fragme	52
52E-86NL12	lm							indeterminate	rib/spine		7	fragme	18
52E-86NL12	lm							indeterminate	Metapodial		2	fragme	4
52E-86NL12	lm							Indeterminate	long bone		14	fragme	15
52E-86NL12	lm							Indeterminate	indeterminate		2	fragme	1
52E-86NL12	mm/sm							Indeterminate	long bone		3	fragme	0
52E-86NL12	mm/sm							Indeterminate	rib/spine		9	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
52E-86NL11		Tooth root	
52E-86NL11		indeterminate	b=2
52E-86NL12	woodpecker-si	Coracoid	
52E-86NL12	M bird	2nd Phalanx	
52E-86NL12	zebu	Tibia	
52E-86NL12	zebu	2nd Phalanx	b=1
52E-86NL12		Tooth	
52E-86NL12		long bone	
52E-86NL12		rib/spine	b=1
52E-86NL12		indeterminate	b=3
52E-86NL12	sheep/goat/de	Femur	
52E-86NL12	sheep/goat/de	Radius	
52E-86NL12	pig	Molar	dev=old adult
52E-86NL12	shrew	Mandible	with teeth
52E-86NL12		Tooth	
52E-86NL12		Femur	dev=subadult
52E-86NL12		Mandible	
52E-86NL12		Petris Temporal	
52E-86NL12		long bone	b=9
52E-86NL12		rib/spine	b=4, c=2
52E-86NL12		indeterminate	b=3
52E-86NL12	rat/mouse	Tibia	
52E-86NL12	rat/mouse	Femur	
52E-86NL12	rat/mouse	Tibia	
52E-86NL12		1st Phalanx	dev=fetal/newborn
52E-86NL12	sm/bird	long bone	b=5
52E-86NL12	sm/bird	Vert	
52E-86NL12		rib/spine	b=1
52E-86NL12		indeterminate	b=24, c=3
52E-86NL12		rib/spine	b=1
52E-86NL12		Metapodial	b=2
52E-86NL12		long bone	b=9
52E-86NL12		indeterminate	b=2
52E-86NL12		long bone	b=2
52E-86NL12		rib/spine	b=5

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
52E-86NL12	Aves					bird		Indeterminate	long bone		4	fragme	2
52E-86NL14	Aves					L bird		fused	1st Phalanx		1	Comple	1
52E-86NL14	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Arch	Indeterminate	vert, cervical		1	1/2	38
52E-86NL14	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Epiphy	Unfused	vert, cervical		1	<1/4	2
52E-86NL14	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Unfused	vert, cervical		1	1/2	10
52E-86NL14	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Arch	Indeterminate	Vert		1	<1/4	16
52E-86NL14	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer			Molar		1	fragme	1
52E-86NL14	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Indeterminate	Ulna	Right	1	<1/4	1
52E-86NL14	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Shaft	Fused	Metapodial		1	<1/4	2
52E-86NL14	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		Fused	Mandible		1	fragme	1
52E-86NL14	mm							Unfused	Vert		2	fragme	1
52E-86NL14	Mammalia	Rodentia				rat/mouse	Upper		Incisor		1	Comple	0
52E-86NL14	Mammalia	Rodentia				rat/mouse	Lower		Incisor		1	Comple	0
52E-86NL14	Mammalia	Rodentia				rat/mouse		Prox.=Unfuse	Humerus	Left	1	Comple	0
52E-86NL14	Mammalia	Rodentia				rat/mouse	Shaft	Prox.=Unfuse	Humerus	Right	1	fragme	0
52E-86NL14	Mammalia	Rodentia				rat/mouse	Proxim	Fused	Tibia	Right	1	fragme	0
52E-86NL14	Mammalia	Rodentia				rat/mouse		Fused	Tibia	Left	1	Comple	0
52E-86NL14	Reptilia	Testudines				turtle	Proxim	fused	Humerus		1	fragme	1
52E-86NL14	Reptilia	Squamata				snake		fused	Vert		1	Comple	0
52E-86NL14	sm/bird					sm/bird		indeterminate	long bone		10	fragme	3
52E-86NL14	mm							indeterminate	rib/spine		4	fragme	1
52E-86NL14	mm								Tooth		1	fragme	0
52E-86NL14	lm							indeterminate	rib/spine		7	fragme	36
52E-86NL14	lm							indeterminate	long bone		7	fragme	32
52E-86NL14	lm							indeterminate	Skull		1	fragme	10
52E-86NL14	lm							Indeterminate	indeterminate		24	fragme	40
52E-86NL14	mm							indeterminate	indeterminate		58	fragme	36
52E-86NL14	unident							indeterminate	indeterminate			fragme	31
52E-86NL14	lm/mm							fused	Costal Cartilage		1	fragme	2
52E-86NL14	lm							indeterminate	long bone		15	fragme	18
52E-86NL14	lm							indeterminate	rib/spine		4	fragme	3
52E-86NL15	Aves					bird		indeterminate	long bone		4	fragme	2
52E-86NL15	unident							indeterminate	indeterminate			fragme	16
52E-86NL15	lm							indeterminate	long bone		23	fragme	40
52E-86NL15	lm							Indeterminate	rib/spine		6	fragme	8

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
52E-86NL12	bird	long bone	b=3
52E-86NL14	L bird	1st Phalanx	
52E-86NL14	zebu	vert, cervical	
52E-86NL14	zebu	vert, cervical	
52E-86NL14	zebu	vert, cervical	
52E-86NL14	zebu	Vert	thoracic or lumbar vert
52E-86NL14	sheep/goat/de	Molar	
52E-86NL14	sheep/goat/de	Ulna	
52E-86NL14	sheep/goat/de	Metapodial	mineralized
52E-86NL14	sheep/goat/de	Mandible	
52E-86NL14		Vert	dev=subadult
52E-86NL14	rat/mouse	Incisor	
52E-86NL14	rat/mouse	Incisor	
52E-86NL14	rat/mouse	Humerus	
52E-86NL14	rat/mouse	Humerus	
52E-86NL14	rat/mouse	Tibia	
52E-86NL14	rat/mouse	Tibia	
52E-86NL14	turtle	Humerus	
52E-86NL14	snake	Vert	
52E-86NL14	sm/bird	long bone	b=3
52E-86NL14		rib/spine	b=1
52E-86NL14		Tooth	
52E-86NL14		rib/spine	b=2
52E-86NL14		long bone	b=2
52E-86NL14		Skull	
52E-86NL14		indeterminate	b=3, c=1
52E-86NL14		indeterminate	b=13, c=1
52E-86NL14		indeterminate	b=19, c=1
52E-86NL14		Costal Cartilage	
52E-86NL14		long bone	b=5
52E-86NL14		rib/spine	b=3
52E-86NL15	bird	long bone	b=1, c=3, mineralized
52E-86NL15		indeterminate	mineralized
52E-86NL15		long bone	b=5, mineralized
52E-86NL15		rib/spine	b=2, mineralized

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
52E-86NL15	lm							Indeterminate	Vert		1	fragme	8
52E-86NL15	lm							Indeterminate	Skull		4	fragme	3
52E-86NL15	lm								Tooth		1	fragme	0
52E-86NL15	lm							Indeterminate	indeterminate		16	fragme	55
52E-86NL15	mm							Indeterminate	long bone		12	fragme	6
52E-86NL15	mm							Indeterminate	rib/spine		4	fragme	2
52E-86NL15	lm							indeterminate	vert, thoracic		1	1/2	12
52E-86NL15	lm						Distal	indeterminate	1st Phalanx		1	1/4	5
52E-86NL15	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		fused	Radial carpal		1	Comple	1
52E-86NL15	Mammalia							indeterminate	Scapula		1	fragme	1
52E-86NL15	sm							fused	Petris Temporal		2	fragme	0
52E-86NL15	sm							Indeterminate	long bone		3	fragme	0
52E-86NL15	sm								Incisor		1	fragme	0
52E-86NL15	lm							Indeterminate	rib/spine		9	fragme	15
52E-86NL15	lm							Indeterminate	long bone		4	fragme	8
52E-86NL15	mm							Indeterminate	long bone		2	fragme	0
52E-86NL15	lm/mm							Indeterminate	indeterminate		12	fragme	5
52E-86NL16	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	Astragalus	Left	1	Comple	27
52E-86NL16	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			Tooth		2	fragme	6
52E-86NL16	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	Fused	Metapodial		1	fragme	10
52E-86NL16	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Unfused	Radius		1	fragme	1
52E-86NL16	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Fused	Metapodial		1	fragme	3
52E-86NL16	mm								Antler		1	fragme	2
52E-86NL16	Osteichthyes					fish		Fused	Vert		1	Comple	1
52E-86NL16	lm							indeterminate	Skull		1	fragme	11
52E-86NL16	lm							indeterminate	rib/spine		4	fragme	19
52E-86NL16	lm							indeterminate	long bone		6	fragme	21
52E-86NL16	lm							indeterminate	indeterminate		5	fragme	27
52E-86NL16	mm							indeterminate	rib/spine		3	fragme	7
52E-86NL16	mm							indeterminate	long bone		9	fragme	17
52E-86NL16	mm							indeterminate	indeterminate		23	fragme	27
52E-86NL16	sm/bird					sm/bird		indeterminate	long bone		3	fragme	1
52E-86NL16	unident							indeterminate	indeterminate			fragme	13
52E-86NL16	lm/mm						Centru	indeterminate	Vert		1	fragme	2
52E-86NL16	lm							indeterminate	long bone		6	fragme	6

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
52E-86NL15		Vert	mineralized
52E-86NL15		Skull	b=1, mineralized
52E-86NL15		Tooth	mineralized
52E-86NL15		indeterminate	b=2, pc=6, mineralized
52E-86NL15		long bone	cut=1, mineralized
52E-86NL15		rib/spine	mineralized
52E-86NL15		vert, thoracic	mineralized
52E-86NL15		1st Phalanx	mineralized
52E-86NL15	sheep/goat	Radial carpal	mineralized
52E-86NL15		Scapula	dev=fetal/newborn, mineralized
52E-86NL15		Petris Tempo	mineralized
52E-86NL15		long bone	c=1, mineralized
52E-86NL15		Incisor	mineralized
52E-86NL15		rib/spine	b=3
52E-86NL15		long bone	b=2
52E-86NL15		long bone	
52E-86NL15		indeterminate	b=3
52E-86NL16	zebu	Astragalus	GL1 56.5 GLm 52 Bd 35.7 D1 30.2 Dm 30.1
52E-86NL16	zebu	Tooth	
52E-86NL16	zebu	Metapodial	
52E-86NL16	sheep/goat/de	Radius	
52E-86NL16	sheep/goat/de	Metapodial	b=1, 50% mineralized
52E-86NL16		Antler	very dense antler
52E-86NL16	fish	Vert	40 - 50 cm standard length
52E-86NL16		Skull	
52E-86NL16		rib/spine	
52E-86NL16		long bone	
52E-86NL16		indeterminate	
52E-86NL16		rib/spine	b=1
52E-86NL16		long bone	b=3
52E-86NL16		indeterminate	b=3
52E-86NL16	sm/bird	long bone	
52E-86NL16		indeterminate	b=5
52E-86NL16		Vert	c=1
52E-86NL16		long bone	b=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
52E-86NL16	mm							indeterminate	rib/spine		2	fragme	1
52E-86NL16	mm							indeterminate	long bone		1	fragme	0
52E-86NL16	lm/mm							indeterminate	indeterminate		2	fragme	0
52E-86NL16	lm							indeterminate	indeterminate		3	fragme	6
52E-86NL17	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	1st Phalanx		1	Comple	23
52E-86NL17	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			Incisor		2	Comple	3
52E-86NL17	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	tarsal 2/3		1	Comple	10
52E-86NL17	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Arch	fused	Vert		1	fragme	12
52E-86NL17	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	Mandible		1	fragme	12
52E-86NL17	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	Skull		1	fragme	10
52E-86NL17	mm								Antler		1	fragme	2
52E-86NL17	Mammalia	Rodentia				rat/mouse	Proxim	Fused	Femur	Right	1	fragme	0
52E-86NL17	Mammalia	Rodentia				rat/mouse	Proxim	Unfused	Femur	Left	1	fragme	0
52E-86NL17	Mammalia	Rodentia				rat/mouse		Unfused	Femur	Left	1	Comple	0
52E-86NL17	Mammalia	Rodentia				rat/mouse	Distal	fused	Tibia		1	fragme	0
52E-86NL17	sm/bird					sm/bird		Indeterminate	long bone		12	fragme	3
52E-86NL17	lm							Indeterminate	indeterminate		15	fragme	53
52E-86NL17	lm							Indeterminate	long bone		3	fragme	30
52E-86NL17	lm							Indeterminate	rib/spine		2	fragme	8
52E-86NL17	mm							Indeterminate	indeterminate		24	fragme	41
52E-86NL17	mm							Indeterminate	indeterminate		10	fragme	14
52E-86NL17	mm							indeterminate	rib/spine		6	fragme	6
52E-86NL17	unident							indeterminate	indeterminate			fragme	11
52E-86NL17	mm							indeterminate	scapula	prox	2	1/4	10
52E-86NL17	Mammalia								tooth		1	1/4	0
52E-86NL17	lm							Indeterminate	long bone		11	fragme	15
52E-86NL17	lm							Indeterminate	rib/spine		3	fragme	5
52E-86NL17	mm							Indeterminate	rib/spine		2	fragme	0
52E-86NL17	lm							Indeterminate	indeterminate		11	fragme	5
52E-86NL18	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			Molar		1	fragme	3
52E-86NL18	lm							fused	Carpal/tarsal		1	Comple	1
52E-86NL18	lm							Indeterminate	long bone		4	fragme	7
52E-86NL18	lm							indeterminate	rib/spine		2	fragme	3
52E-86NL18	sm/bird					sm/bird		indeterminate	long bone		2	fragme	1
52E-86NL18	unident							indeterminate	indeterminate			fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
52E-86NL16		rib/spine	b=1
52E-86NL16		long bone	
52E-86NL16		indeterminate	b=1
52E-86NL16		indeterminate	b=1
52E-86NL17	zebu	1st Phalanx	Bp 28.2 Bd 27.2 GLpe 61.8
52E-86NL17	zebu	Incisor	
52E-86NL17	zebu	tarsal 2/3	
52E-86NL17	zebu	Vert	
52E-86NL17	zebu	Mandible	
52E-86NL17	zebu	Skull	
52E-86NL17		Antler	
52E-86NL17	rat/mouse	Femur	
52E-86NL17	rat/mouse	Femur	
52E-86NL17	rat/mouse	Femur	
52E-86NL17	rat/mouse	Tibia	c=1
52E-86NL17	sm/bird	long bone	c=3
52E-86NL17		indeterminate	b=1, c=1
52E-86NL17		long bone	
52E-86NL17		rib/spine	c=1
52E-86NL17		indeterminate	b=5
52E-86NL17		indeterminate	b=3
52E-86NL17		rib/spine	b=2
52E-86NL17		indeterminate	b=3
52E-86NL17		scapula	b=1
52E-86NL17		tooth	
52E-86NL17		long bone	b=7, c=1
52E-86NL17		rib/spine	b=1
52E-86NL17		rib/spine	b=2
52E-86NL17		indeterminate	b=6
52E-86NL18	zebu	Molar	
52E-86NL18		Carpal/tarsal	
52E-86NL18		long bone	b=3
52E-86NL18		rib/spine	b=1
52E-86NL18	sm/bird	long bone	b=2
52E-86NL18		indeterminate	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
52E-86NL18	lm							indeterminate	rib/spine		1	fragme	0
52E-86NL18	lm							indeterminate	long bone		10	fragme	9
52E-86NL19	lm							indeterminate	long bone		5	fragme	10
52E-86NL19	lm							indeterminate	indeterminate		2	fragme	4
52E-86NL19	mm							indeterminate	long bone		2	fragme	2
52E-86NL19	mm							indeterminate	indeterminate		8	fragme	5
52E-86NL19	mm							indeterminate	rib/spine		2	fragme	1
52E-86NL19	sm							indeterminate	long bone		2	fragme	1
52E-86NL19	lm							indeterminate	indeterminate		1	fragme	2
52E-86NL19	mm							Fused	Radial carpal		1	Comple	2
52E-86NL19	mm							Unfused	vert, lumbar		1	fragme	1
52E-86NL2	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	Indeterminate	Phalanx		2	<1/4	6
52E-86NL2	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			Molar		2	fragme	1
52E-86NL2	lm							indeterminate	Skull		1	fragme	1
52E-86NL2	lm							indeterminate	indeterminate		11	fragme	15
52E-86NL2	lm							indeterminate	rib/spine		45	fragme	20
52E-86NL2	lm							indeterminate	long bone		31	fragme	27
52E-86NL2	mm								Molar		7	fragme	1
52E-86NL2	mm							indeterminate	rib/spine		27	fragme	7
52E-86NL2	mm							Indeterminate	indeterminate		25	fragme	17
52E-86NL2	mm							Indeterminate	long bone		47	fragme	24
52E-86NL2	sm							Indeterminate	long bone		1	fragme	0
52E-86NL2	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		fused	1st Tarsal		1	Comple	0
52E-86NL2	Reptilia	Testudines				turtle		fused	Carapace		1	fragme	1
52E-86NL2	Reptilia	Squamata				snake		fused	Vert		1	Comple	0
52E-86NL2	Osteichthyes					fish			Tooth		1	Comple	0
52E-86NL2	unident							Indeterminate	indeterminate			fragme	39
52E-86NL2	mm							Indeterminate	long bone		1	fragme	0
52E-86NL20	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	1st Phalanx		1	fragme	13
52E-86NL20	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	fused	Calcaneus		1	1/4	11
52E-86NL20	lm							Indeterminate	long bone		3	fragme	16
52E-86NL20	lm							Indeterminate	indeterminate		1	fragme	10
52E-86NL20	lm								horn core		1	fragme	17
52E-86NL20	lm							Indeterminate	indeterminate		1	fragme	1
52E-86NL20	lm							Indeterminate	rib/spine		6	fragme	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
52E-86NL18		rib/spine	b=1
52E-86NL18		long bone	b=9
52E-86NL19		long bone	b=2, c=1
52E-86NL19		indeterminate	
52E-86NL19		long bone	
52E-86NL19		indeterminate	
52E-86NL19		rib/spine	
52E-86NL19		long bone	
52E-86NL19		indeterminate	
52E-86NL19		Radial carpal	
52E-86NL19		vert, lumbar	dev=fetal/newborn
52E-86NL2	zebu	Phalanx	
52E-86NL2	zebu	Molar	
52E-86NL2		Skull	b=1
52E-86NL2		indeterminate	c=1
52E-86NL2		rib/spine	b=19
52E-86NL2		long bone	b=13, c=3
52E-86NL2		Molar	b=3
52E-86NL2		rib/spine	b=11, c=1
52E-86NL2		indeterminate	b=4, c=1
52E-86NL2		long bone	b=10. c=4
52E-86NL2		long bone	b=1
52E-86NL2	sheep/goat	1st Tarsal	
52E-86NL2	turtle	Carapace	b=1, pol=1
52E-86NL2	snake	Vert	
52E-86NL2	fish	Tooth	
52E-86NL2		indeterminate	b=51, c=14
52E-86NL2		long bone	b=1
52E-86NL20	zebu	1st Phalanx	
52E-86NL20	zebu	Calcaneus	
52E-86NL20		long bone	c=1
52E-86NL20		indeterminate	
52E-86NL20		horn core	
52E-86NL20		indeterminate	
52E-86NL20		rib/spine	b=2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
52E-86NL20	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	Astragalus		1	fragme	5
52E-86NL20	mm							indeterminate	long bone		7	fragme	8
52E-86NL20	mm							indeterminate	indeterminate		5	fragme	4
52E-86NL21	Mammalia								tooth		1	fragme	0
52E-86NL21	lm							Indeterminate	rib/spine		4	fragme	3
52E-86NL21	lm							Indeterminate	long bone		7	fragme	11
52E-86NL21	lm							Indeterminate	long bone		5	fragme	6
52E-86NL21	lm							Indeterminate	Skull		2	fragme	7
52E-86NL21	lm							Indeterminate	rib/spine		1	fragme	0
52E-86NL21	lm							Indeterminate	Metapodial		2	fragme	4
52E-86NL21	lm							Indeterminate	long bone		3	fragme	9
52E-86NL21	mm							Indeterminate	long bone		1	fragme	0
52E-86NL23	lm/mm							indeterminate	long bone		1	fragme	1
52E-86NL23	lm							indeterminate	rib/spine		1	fragme	0
52E-86NL23	lm/mm							indeterminate	indeterminate		3	fragme	1
52E-86NL24	lm							indeterminate	rib/spine		2	fragme	2
52E-86NL24	lm							indeterminate	long bone		9	fragme	17
52E-86NL25	lm							indeterminate	long bone		2	fragme	5
52E-86NL25	lm							indeterminate	long bone		1	fragme	2
52E-86NL25	mm							indeterminate	rib/spine		3	fragme	2
52E-86NL26	lm							indeterminate	Skull		2	fragme	3
52E-86NL26	lm							indeterminate	long bone		4	fragme	5
52E-86NL26	mm							indeterminate	rib/spine		1	fragme	0
52E-86NL26	Mammalia	Artiodactyla	Bovidae	Antilope	cervicapra	blackbuck		Fused	3rd Phalanx		1	Comple	9
52E-86NL29	lm							Indeterminate	long bone		3	fragme	4
52E-86NL29	lm/mm							Indeterminate	indeterminate		2	fragme	0
52E-86NL3	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	tarsal 2/3		1	3/4+	4
52E-86NL3	lm							indeterminate	long bone		7	fragme	24
52E-86NL3	lm							indeterminate	indeterminate		3	fragme	4
52E-86NL3	mm							indeterminate	long bone		11	fragme	8
52E-86NL3	mm							indeterminate	rib/spine		6	fragme	2
52E-86NL3	mm							indeterminate	indeterminate		3	fragme	1
52E-86NL3	unident							indeterminate	indeterminate			fragme	11
52E-86NL4	lm							indeterminate	indeterminate		1	fragme	3
52E-86NL4	lm							Indeterminate	rib/spine		5	fragme	3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
52E-86NL20	sheep/goat/de	Astragalus	
52E-86NL20		long bone	b=2
52E-86NL20		indeterminate	b=5
52E-86NL21		tooth	
52E-86NL21		rib/spine	b=4
52E-86NL21		long bone	b=6
52E-86NL21		long bone	b=3
52E-86NL21		Skull	
52E-86NL21		rib/spine	b=1
52E-86NL21		Metapodial	b=2, w=1, pol=1
52E-86NL21		long bone	b=2
52E-86NL21		long bone	b=1
52E-86NL23		long bone	b=1
52E-86NL23		rib/spine	b=1
52E-86NL23		indeterminate	b=3
52E-86NL24		rib/spine	b=1
52E-86NL24		long bone	b=9
52E-86NL25		long bone	b=1
52E-86NL25		long bone	b=1
52E-86NL25		rib/spine	b=3
52E-86NL26		Skull	
52E-86NL26		long bone	b=3
52E-86NL26		rib/spine	b=1
52E-86NL26	blackbuck	3rd Phalanx	DS 45.91 Ld 40.69 MBS 13.47
52E-86NL29		long bone	b=3
52E-86NL29		indeterminate	
52E-86NL3	zebu	tarsal 2/3	
52E-86NL3		long bone	b=5
52E-86NL3		indeterminate	c=1
52E-86NL3		long bone	c=3
52E-86NL3		rib/spine	b=4
52E-86NL3		indeterminate	b=2
52E-86NL3		indeterminate	b=20
52E-86NL4		indeterminate	
52E-86NL4		rib/spine	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
52E-86NL4	mm								Tooth		1	fragme	0
52E-86NL4	mm							Indeterminate	long bone		9	fragme	3
52E-86NL4	mm							Indeterminate	indeterminate		7	fragme	3
52E-86NL4	mm								Tooth		1	fragme	0
52E-86NL4	unident							Indeterminate	indeterminate			fragme	10
52E-86NL5	Mammalia	Artiodactyla	Bovidae			L bovid		Fused	Phalanx		1	<1/4	2
52E-86NL5	lm							Indeterminate	long bone		4	fragme	4
52E-86NL5	lm							Indeterminate	rib/spine		5	fragme	2
52E-86NL5	mm								Tooth Root		1	Comple	0
52E-86NL5	mm						Distal	Indeterminate	Humerus		1	<1/4	5
52E-86NL5	mm						Arch	Indeterminate	vert, thoracic		1	<1/4	4
52E-86NL5	mm							Indeterminate	long bone		5	fragme	1
52E-86NL5	mm							Indeterminate	indeterminate		3	fragme	1
52E-86NL5	mm							Indeterminate	rib/spine		7	fragme	1
52E-86NL5	sm							Indeterminate	long bone		1	fragme	0
52E-86NL5	sm							indeterminate	vert, caudal		1	Comple	0
52E-86NL5	unident							indeterminate	indeterminate			fragme	7
52E-86NL6	lm							indeterminate	long bone		8	fragme	8
52E-86NL6	lm							Indeterminate	rib/spine		6	fragme	7
52E-86NL6	lm							Indeterminate	indeterminate		4	fragme	15
52E-86NL6	mm							Indeterminate	long bone		10	fragme	4
52E-86NL6	mm							Indeterminate	rib/spine		8	fragme	1
52E-86NL6	mm							Indeterminate	indeterminate		3	fragme	1
52E-86NL6	sm							Indeterminate	long bone		7	fragme	2
52E-86NL6	unident							Indeterminate	indeterminate			fragme	2
52E-86NL6	unident							Indeterminate	indeterminate			fragme	10
52E-86NL7	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		Fused	2nd Phalanx		1	Comple	1
52E-86NL7	lm							indeterminate	rib/spine		4	fragme	6
52E-86NL7	lm							indeterminate	indeterminate		3	fragme	3
52E-86NL7	mm								Tooth		1	fragme	0
52E-86NL7	mm							indeterminate	long bone		4	fragme	2
52E-86NL7	unident							indeterminate	indeterminate			fragme	6
52E-86NL8	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	Astragalus		1	1/2	32
52E-86NL8	lm							indeterminate	long bone		1	fragme	9
52E-86NL8	lm							indeterminate	rib/spine		1	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
52E-86NL4		Tooth	
52E-86NL4		long bone	b=7, c=1
52E-86NL4		indeterminate	b=4
52E-86NL4		Tooth	b=1
52E-86NL4		indeterminate	b=29, c=1
52E-86NL5	L bovid	Phalanx	b=1, P1 or P2
52E-86NL5		long bone	b=1
52E-86NL5		rib/spine	b=1
52E-86NL5		Tooth Root	
52E-86NL5		Humerus	
52E-86NL5		vert, thoracic	
52E-86NL5		long bone	
52E-86NL5		indeterminate	b=2
52E-86NL5		rib/spine	b=2
52E-86NL5		long bone	
52E-86NL5		vert, caudal	squirrel size
52E-86NL5		indeterminate	b=7, c=3
52E-86NL6		long bone	b=3
52E-86NL6		rib/spine	b=4
52E-86NL6		indeterminate	b=2
52E-86NL6		long bone	b=7, c=2
52E-86NL6		rib/spine	b=6
52E-86NL6		indeterminate	b=2
52E-86NL6		long bone	b=2, c=2
52E-86NL6		indeterminate	w=1, pol=1, inc=1
52E-86NL6		indeterminate	b=24, c=6
52E-86NL7	sheep/goat	2nd Phalanx	
52E-86NL7		rib/spine	
52E-86NL7		indeterminate	
52E-86NL7		Tooth	
52E-86NL7		long bone	b=2
52E-86NL7		indeterminate	b=8, c=2
52E-86NL8	zebu	Astragalus	50% mineralized
52E-86NL8		long bone	50% mineralized
52E-86NL8		rib/spine	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
52E-86NL8	mm								Tooth Root		1	fragme	1
52E-86NL8	mm							indeterminate	long bone		6	fragme	2
52E-86NL8	mm							indeterminate	indeterminate		4	fragme	1
52E-86NL8	sm							Indeterminate	long bone		1	fragme	0
52E-86NL8	unident							Indeterminate	indeterminate			fragme	1
52E-86NL9	Mammalia	Artiodactyla	Bovidae			bovid	Distal	Indeterminate	Femur	Right	1	<1/4	12
52E-86NL9	lm							indeterminate	long bone		8	fragme	7
52E-86NL9	lm							indeterminate	rib/spine		2	fragme	3
52E-86NL9	mm							indeterminate	long bone		8	fragme	3
52E-86NL9	mm							indeterminate	rib/spine		3	fragme	1
52E-86NL9	mm							indeterminate	indeterminate		2	fragme	1
52E-86NL9	unident							indeterminate	indeterminate			fragme	4
53E-86NL21	Aves					bird		indeterminate	long bone		3	fragme	1
53E-86NL21	lm							Unfused	vert, cervical		1	1/2 - 3/	17
53E-86NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Indeterminate	2nd Phalanx		1	<1/4	4
53E-86NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	2nd Phalanx		1	Comple	18
53E-86NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Indeterminate	1st Phalanx		1	1/4 - 1/	11
53E-86NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	3rd Phalanx		1	Comple	16
53E-86NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Unfused	Ulna	Right	1	1/4 - 1/	10
53E-86NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Unfused	Ulna	Left	1	<1/4	11
53E-86NL21	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo			Premolar	Right	1	Comple	3
53E-86NL21	Mammalia	Artiodactyla	Cervidae	Cervus	unicolor	sambar		Fused	2nd Phalanx		1	1/2 - 3/	9
53E-86NL21	Mammalia		Cervidae			Smaller than sambar		Fused	2nd Phalanx		1	Comple	7
53E-86NL21	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Proxim	Fused	Radius and U	Right	1	1/4 - 1/	9
53E-86NL21	lm							Indeterminate	rib/spine		5	fragme	29
53E-86NL21	lm							Fused	Costal Cartilage		1	fragme	1
53E-86NL21	lm							Indeterminate	indeterminate		21	fragme	70
53E-86NL21	lm							Indeterminate	long bone		27	fragme	64
53E-86NL21	lm						Epiphy	Unfused	Vert		1	fragme	1
53E-86NL21	mm						Proxim	Unfused	Femur		1	<1/4	2
53E-86NL21	mm							Fusing	vert, lumbar		1	1/4 - 1/	2
53E-86NL21	mm						Epiphy	Unfused	vert, cervical		1	<1/4	0
53E-86NL21	mm							Fused	vert, lumbar		1	3/4+	8
53E-86NL21	mm							Fused	vert, lumbar		1	1/4 - 1/	4
53E-86NL21	mm							fused	Costal Cartilage		2	fragme	3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
52E-86NL8		Tooth Root	
52E-86NL8		long bone	b=4, c=2
52E-86NL8		indeterminate	b=1
52E-86NL8		long bone	b=1
52E-86NL8		indeterminate	c=2
52E-86NL9	bovid	Femur	
52E-86NL9		long bone	b=3
52E-86NL9		rib/spine	
52E-86NL9		long bone	b=4
52E-86NL9		rib/spine	b=2
52E-86NL9		indeterminate	
52E-86NL9		indeterminate	b=4
53E-86NL21	bird	long bone	
53E-86NL21		vert, cervical	
53E-86NL21	zebu/buffalo	2nd Phalanx	
53E-86NL21	zebu/buffalo	2nd Phalanx	Bp 29.1 Bd 28.6 GL 45; articulates with following Phal 1
53E-86NL21	zebu/buffalo	1st Phalanx	Bd 28.6; articulates with previous Phal 2
53E-86NL21	zebu/buffalo	3rd Phalanx	DLS 67.2 Ld 51.8 Mbs 21.5
53E-86NL21	zebu/buffalo	Ulna	
53E-86NL21	zebu/buffalo	Ulna	
53E-86NL21	zebu/buffalo	Premolar	dev=adult
53E-86NL21	sambar	2nd Phalanx	Bp 24.3 GL 40.8
53E-86NL21	Smaller than s	2nd Phalanx	Bp 20.2 Bd 14.6 GL 35.9
53E-86NL21	goat	Radius and Ulna	
53E-86NL21		rib/spine	
53E-86NL21		Costal Cartilage	
53E-86NL21		indeterminate	b=3
53E-86NL21		long bone	b=14
53E-86NL21		Vert	
53E-86NL21		Femur	
53E-86NL21		vert, lumbar	
53E-86NL21		vert, cervical	
53E-86NL21		vert, lumbar	
53E-86NL21		vert, lumbar	
53E-86NL21		Costal Cartilage	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
53E-86NL21	Mammalia	Rodentia	Hystricidae	Hystrix	indica	Indian porcupine		fused	Ischium	Right	1	Comple	7
53E-86NL21	mm							Indeterminate	long bone		19	fragme	22
53E-86NL21	mm							Indeterminate	indeterminate		7	fragme	9
53E-86NL21	mm							Indeterminate	rib/spine		5	fragme	5
53E-86NL21	sm							Indeterminate	long bone		3	fragme	2
53E-86NL21	Osteichthyes					fish		fused	Vert		5	Comple	1
53E-86NL21	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Basioccipital		1	Comple	1
53E-86NL21	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Neurocranial		1	fragme	0
53E-86NL21	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Skull		2	fragme	0
53E-86NL21	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Quadrate	Right	1	Comple	1
53E-86NL21	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Articular	Right	1	Comple	0
53E-86NL21	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Ceratohyal &	Left	1	Comple	0
53E-86NL21	Mammalia	Rodentia				rat/mouse		Prox.=Unfuse	Tibia	Left	1	Comple	0
53E-86NL21	Osteichthyes					fish		indeterminate	rib/spine		4	fragme	1
53E-86NL21	unident							indeterminate	indeterminate			fragme	19
53E-86NL22	unident							indeterminate	indeterminate			fragme	16
53E-86NL22	Mammalia	Rodentia				rat/mouse	Distal	fused	Tibia		2	1/2	0
53E-86NL22	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Fused	Scapula		1	1/2 - 3/	16
53E-86NL22	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Lower	Erupting	M2		1	Comple	7
53E-86NL22	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	Ulnar carpal		1	Comple	8
53E-86NL22	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	2nd Phalanx		1	Comple	15
53E-86NL22	Osteichthyes					fish		indeterminate	indeterminate		1	fragme	2
53E-86NL22	mm							indeterminate	long bone		6	fragme	4
53E-86NL22	mm							indeterminate	rib/spine		3	fragme	1
53E-86NL22	mm							indeterminate	indeterminate		2	fragme	1
53E-86NL22	lm							indeterminate	long bone		11	fragme	40
53E-86NL22	lm							indeterminate	rib/spine		8	fragme	26
53E-86NL22	lm							indeterminate	indeterminate		8	fragme	18
53E-86NL22	lm							Indeterminate	Mandible	Right	1	1/2	36
53E-86NL22	lm							Fused	Sesamoid		1	Comple	2
53E-86NL22	lm							Indeterminate	Vert		1	1/2	10
53E-86NL22	lm							Indeterminate	Skull		3	fragme	21
53E-86NL23	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		Fused	Mandible	Left	1	fragme	16
53E-86NL23	sm							Unfused	vert, caudal		1	Comple	0
53E-86NL23	unident							Indeterminate	indeterminate			fragme	14

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
53E-86NL21	Indian porcupi	Ischium	LAR 16.1
53E-86NL21		long bone	b=6
53E-86NL21		indeterminate	
53E-86NL21		rib/spine	b=1
53E-86NL21		long bone	
53E-86NL21	fish	Vert	stuck together w/ soil concretions; probably catfish; SL 40-50 cms
53E-86NL21	catfish	Basioccipital	35 - 40 cm Standard Length; from same individual as following two entries
53E-86NL21	catfish	Neurocranial	35 - 40 cm Standard Length; from same individual as previous and following
53E-86NL21	catfish	Skull	35 - 40 cm Standard Length; from same individual as previous two entries
53E-86NL21	catfish	Quadrate	35 - 40 cm Standard Length
53E-86NL21	catfish	Articular	30 - 35 cm Standard Length
53E-86NL21	catfish	Ceratohyal &	30 - 35 cm Standard Length
53E-86NL21	rat/mouse	Tibia	
53E-86NL21	fish	rib/spine	
53E-86NL21		indeterminate	b=6, c=2
53E-86NL22		indeterminate	c=1, mineralized
53E-86NL22	rat/mouse	Tibia	mineralized
53E-86NL22	zebu/buffalo	Scapula	mineralized
53E-86NL22	zebu/buffalo	M2	mineralized
53E-86NL22	zebu/buffalo	Ulnar carpal	mineralized
53E-86NL22	zebu/buffalo	2nd Phalanx	Bp 28.1 Bd 24.0 GL 40.8; mineralized level
53E-86NL22	fish	indeterminate	mineralized level
53E-86NL22		long bone	mineralized
53E-86NL22		rib/spine	b=1, cut=1, mineralized
53E-86NL22		indeterminate	mineralized
53E-86NL22		long bone	b=5, pc=4, c=1, mineralized
53E-86NL22		rib/spine	b=1, mineralized
53E-86NL22		indeterminate	mineralized
53E-86NL22		Mandible	mineralized
53E-86NL22		Sesamoid	mineralized
53E-86NL22		Vert	mineralized
53E-86NL22		Skull	mineralized
53E-86NL23	sheep/goat/de	Mandible	P2 through P4
53E-86NL23		vert, caudal	
53E-86NL23		indeterminate	b=4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
53E-86NL23	lm							Indeterminate	long bone		2	fragme	3
53E-86NL23	lm							Indeterminate	Vert		3	fragme	15
53E-86NL23	lm							Indeterminate	rib/spine		6	fragme	22
53E-86NL23	lm							Indeterminate	indeterminate		4	fragme	16
53E-86NL23	mm							Indeterminate	long bone		5	fragme	5
53E-86NL23	mm							Indeterminate	rib/spine		1	fragme	1
53E-86NL23	sm							Indeterminate	long bone		1	fragme	0
53E-86NL23	sm							Indeterminate	Rib		1	fragme	0
53E-86NL24	Aves					bird	Distal	Fused	Tarsometatarsus		1	3/4+	0
53E-86NL24	lm							Indeterminate	Atlas		1	1/2	29
53E-86NL24	Mammalia	Artiodactyla	Bovidae			bovid		fused	3rd Phalanx		1	Comple	17
53E-86NL24	Mammalia	Artiodactyla	Bovidae			bovid		fused	1st Phalanx		1	Comple	21
53E-86NL24	Mammalia	Artiodactyla	Bovidae			bovid	Upper		Molar		1	Comple	21
53E-86NL24	Mammalia	Artiodactyla	Suidae	Sus		pig	Upper		M1		1	Comple	1
53E-86NL24	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	1st Phalanx		1	Comple	5
53E-86NL24	Mammalia	Rodentia				rat/mouse		fused	Mandible	Left	1	fragme	0
53E-86NL24	Mammalia	Rodentia				rat/mouse	Proxim	fused	Tibia		1	3/4+	0
53E-86NL24	Mammalia	Rodentia				rat/mouse	Distal	fused	Radius		1	1/2	0
53E-86NL24	Mammalia	Rodentia				rat/mouse	Distal	fused	Humerus		1	1/2	0
53E-86NL24	Osteichthyes					fish		fused	Spine		1	Comple	0
53E-86NL24	Mammalia	Artiodactyla	Bovidae			bovid		fused	Radial carpal	Right	1	Comple	12
53E-86NL24	lm						Proxim	Fused	Humerus		1	1/4	14
53E-86NL24	mm							indeterminate	Mandible	Right	1	1/2	9
53E-86NL24	lm						Shaft	indeterminate	long bone		2	fragme	9
53E-86NL24	unident							indeterminate	indeterminate			fragme	24
53E-86NL24	mm							fused	Costal Cartilage		1	fragme	1
53E-86NL24	mm							indeterminate	rib/spine		40	fragme	20
53E-86NL24	mm							indeterminate	long bone		20	fragme	17
53E-86NL24	mm							indeterminate	Vert		5	fragme	4
53E-86NL24	mm							indeterminate	Skull		8	fragme	7
53E-86NL24	mm							indeterminate	indeterminate		60	fragme	40
53E-86NL24	lm							indeterminate	Rib		56	fragme	172
53E-86NL24	lm							indeterminate	Vert		13	fragme	87
53E-86NL24	lm							indeterminate	long bone		17	fragme	110
53E-86NL24	lm							indeterminate	Skull		10	fragme	39

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
53E-86NL23		long bone	b=1
53E-86NL23		Vert	
53E-86NL23		rib/spine	b=1
53E-86NL23		indeterminate	b=1
53E-86NL23		long bone	
53E-86NL23		rib/spine	
53E-86NL23		long bone	
53E-86NL23		Rib	
53E-86NL24	bird	Tarsometatarsus	
53E-86NL24		Atlas	
53E-86NL24	bovid	3rd Phalanx	DLS 65.0 Ld 51.3 MBS 21.8
53E-86NL24	bovid	1st Phalanx	Bp 25.4 Bd 24.2 GLpe 65.4
53E-86NL24	bovid	Molar	mineralized
53E-86NL24	pig	M1	dev=subadult
53E-86NL24	goat	1st Phalanx	Bp 14.8 Bd 11.6 GLPe 31.2
53E-86NL24	rat/mouse	Mandible	
53E-86NL24	rat/mouse	Tibia	
53E-86NL24	rat/mouse	Radius	
53E-86NL24	rat/mouse	Humerus	
53E-86NL24	fish	Spine	
53E-86NL24	bovid	Radial carpal	
53E-86NL24		Humerus	
53E-86NL24		Mandible	cut=1, between pM and incisors
53E-86NL24		long bone	dev=fetal/newborn
53E-86NL24		indeterminate	
53E-86NL24		Costal Cartilage	
53E-86NL24		rib/spine	b=2
53E-86NL24		long bone	
53E-86NL24		Vert	
53E-86NL24		Skull	
53E-86NL24		indeterminate	
53E-86NL24		Rib	b=1
53E-86NL24		Vert	
53E-86NL24		long bone	c=1
53E-86NL24		Skull	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
53E-86NL24	lm							indeterminate	Scapula		3	fragme	18
53E-86NL24	lm							indeterminate	indeterminate		40	fragme	97
53E-86NL24	lm							indeterminate	long bone		3	fragme	5
53E-86NL24	lm							indeterminate	rib/spine		3	fragme	3
53E-86NL24	lm							indeterminate	Skull		2	fragme	1
53E-86NL25	Aves					bird	Distal	indeterminate	Carpometacarpus		1	fragme	0
53E-86NL25	Mollusca					freshwater shell			shell			fragme	1
53E-86NL25	mm								Incisor		1	Comple	1
53E-86NL25	lm							Indeterminate	rib/spine		9	fragme	53
53E-86NL25	lm							Indeterminate	long bone		7	fragme	68
53E-86NL25	lm							Indeterminate	Vert		1	fragme	6
53E-86NL25	lm							Indeterminate	Skull		3	fragme	17
53E-86NL25	lm								Tooth			fragme	6
53E-86NL25	lm							Indeterminate	Scapula		2	fragme	8
53E-86NL25	lm						Proxim	Unfused	Tibia		1	<1/4	9
53E-86NL25	lm							Indeterminate	indeterminate		14	fragme	35
53E-86NL25	mm							Indeterminate	rib/spine		5	fragme	4
53E-86NL25	mm							Indeterminate	long bone		11	fragme	10
53E-86NL25	unident							Indeterminate	indeterminate			fragme	14
53E-86NL26	Mammalia	Artiodactyla	Bovidae			L bovid		Fused	Astragalus	Left	2	Comple	94
53E-86NL26	Mammalia	Artiodactyla	Bovidae			L bovid	Distal	Fused	1st Phalanx		1	1/2	12
53E-86NL26	Mammalia	Artiodactyla	Bovidae			bovid		Fused	Atlas		1	1/4	17
53E-86NL26	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	Humerus		1	1/4	12
53E-86NL26	sm							Indeterminate	Mandible	Left	1	fragment	
53E-86NL26	sm							Indeterminate	Mandible	Right	1	fragment	
53E-86NL26	lm							indeterminate	long bone		9	fragme	68
53E-86NL26	lm							indeterminate	rib/spine		1	fragme	1
53E-86NL26	lm							indeterminate	Vert		1	fragme	8
53E-86NL26	lm							indeterminate	Skull		2	fragme	7
53E-86NL26	lm						Distal	indeterminate	1st Phalanx		1	3/4+	2
53E-86NL26	lm							indeterminate	Mandible		1	fragme	2
53E-86NL26	lm							indeterminate	indeterminate		3	fragme	5
53E-86NL26	mm							fused	Petris Temporal		1	fragme	2
53E-86NL26	mm							fused	Carpal/tarsal		1	Comple	1
53E-86NL26	mm							indeterminate	Skull		2	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
53E-86NL24		Scapula	
53E-86NL24		indeterminate	
53E-86NL24		long bone	b=3
53E-86NL24		rib/spine	b=2
53E-86NL24		Skull	
53E-86NL25	bird	Carpometacarpus	
53E-86NL25	freshwater she	shell	
53E-86NL25		Incisor	
53E-86NL25		rib/spine	cut=1
53E-86NL25		long bone	
53E-86NL25		Vert	
53E-86NL25		Skull	
53E-86NL25		Tooth	
53E-86NL25		Scapula	
53E-86NL25		Tibia	
53E-86NL25		indeterminate	b=1
53E-86NL25		rib/spine	
53E-86NL25		long bone	b=2
53E-86NL25		indeterminate	b=1
53E-86NL26	L bovid	Astragalus	1. Bd 36.4 GL1 55.8 GLm 51.6 Dm 31.9 Dl 30.6 2. Bd 33.8 GL1 55.3 GLm 51.2 Dm 31.2 Dl 29.9
53E-86NL26	L bovid	1st Phalanx	Bd 20.5
53E-86NL26	bovid	Atlas	
53E-86NL26	goat	Humerus	Bd 35.2
53E-86NL26		Mandible	
53E-86NL26		Mandible	carnivore?
53E-86NL26		long bone	
53E-86NL26		rib/spine	
53E-86NL26		Vert	
53E-86NL26		Skull	cg=1
53E-86NL26		1st Phalanx	dev=fetal/newborn
53E-86NL26		Mandible	dev=fetal/newborn
53E-86NL26		indeterminate	
53E-86NL26		Petris Temporal	
53E-86NL26		Carpal/tarsal	
53E-86NL26		Skull	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
53E-86NL26	mm							indeterminate	long bone		20	fragme	19
53E-86NL26	mm							indeterminate	rib/spine		7	fragme	5
53E-86NL26	mm							indeterminate	Vert		2	fragme	1
53E-86NL26	mm							indeterminate	indeterminate		38	fragme	13
53E-86NL26	Reptilia	Sauria	Varanidae	Varanus		monitor lizard		fused	mandible	Right	1	<1/4	0
53E-86NL26	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Pectoral spin	Right	1	Comple	0
53E-86NL26	Mammalia	Carnivora	Herpestidae			mongoose or wease		Fused	Mandible	Left	1	<1/4	1
53E-86NL27	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	Fused	Humerus	Left	1	1/2 - 3/	165
53E-86NL27	Mammalia	Artiodactyla	Bovidae			L bovid	Proxim	Unfused	Femur	Left	1	3/4+	54
53E-86NL27	Mammalia	Artiodactyla	Bovidae			L bovid	Distal	Fused	Humerus	Left	1	1/4	48
53E-86NL27	Mammalia	Artiodactyla	Bovidae			bovid		Fused	1st Phalanx		1	3/4+	24
53E-86NL27	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	2nd Phalanx		1	Comple	13
53E-86NL27	lm						Proxim	Unfused	Tibia		1	1/4	22
53E-86NL27	Reptilia	Testudines				turtle		Fused	Carapace		1	fragme	2
53E-86NL27	lm							indeterminate	rib/spine		6	fragme	15
53E-86NL27	lm							indeterminate	long bone		5	fragme	13
53E-86NL27	lm						Spine	indeterminate	Vert		1	fragme	5
53E-86NL27	lm							indeterminate	Skull		3	fragme	7
53E-86NL27	mm							indeterminate	rib/spine		8	fragme	3
53E-86NL27	mm							indeterminate	long bone		8	fragme	4
53E-86NL27	mm								Tooth		2	fragme	0
53E-86NL27	mm							Indeterminate	indeterminate		2	fragme	2
53E-86NL27	sm/bird					sm/bird		Indeterminate	long bone		6	fragme	1
53E-86NL27	lm							Indeterminate	rib/spine		2	fragme	1
53E-86NL29	Mammalia	Rodentia				rat/mouse	Distal	Fused	Humerus		1	fragme	0
53E-86NL29	Mammalia	Rodentia				rat/mouse		Fused	Mandible	Right	1	fragme	0
53E-86NL29	Mammalia	Rodentia				rat/mouse	Proxim	Fused	Radius		1	fragme	0
53E-86NL29	Mammalia	Rodentia				rat/mouse	Proxim	Fused	Ulna		1	fragme	0
53E-86NL29	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Fused	Tibia		1	3/4+	162
53E-86NL29	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Unfused	Humerus		1	1/4 - 1/	33
53E-86NL29	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Shaft	Fused	Metatarsal		1	<1/4	6
53E-86NL29	lm							Indeterminate	rib/spine		6	fragme	52
53E-86NL29	lm							Indeterminate	long bone		4	fragme	10
53E-86NL29	lm						Arch	Indeterminate	vert, thoracic		1	1/2	15
53E-86NL29	lm							Indeterminate	Vert		4	fragme	15

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
53E-86NL26		long bone	cut=1
53E-86NL26		rib/spine	
53E-86NL26		Vert	
53E-86NL26		indeterminate	
53E-86NL26	monitor lizard	mandible	with 4 teeth
53E-86NL26	catfish	Pectoral spin	10 - 15 cm standard length
53E-86NL26	mongoose or v	Mandible	with M2 in place
53E-86NL27	zebu	Humerus	
53E-86NL27	L bovid	Femur	
53E-86NL27	L bovid	Humerus	cut=1
53E-86NL27	bovid	1st Phalanx	b=1
53E-86NL27	zebu/buffalo	2nd Phalanx	
53E-86NL27		Tibia	
53E-86NL27	turtle	Carapace	
53E-86NL27		rib/spine	b=1
53E-86NL27		long bone	
53E-86NL27		Vert	
53E-86NL27		Skull	
53E-86NL27		rib/spine	
53E-86NL27		long bone	
53E-86NL27		Tooth	
53E-86NL27		indeterminate	
53E-86NL27	sm/bird	long bone	
53E-86NL27		rib/spine	
53E-86NL29	rat/mouse	Humerus	
53E-86NL29	rat/mouse	Mandible	
53E-86NL29	rat/mouse	Radius	
53E-86NL29	rat/mouse	Ulna	
53E-86NL29	zebu/buffalo	Tibia	
53E-86NL29	zebu/buffalo	Humerus	
53E-86NL29	zebu/buffalo	Metatarsal	
53E-86NL29		rib/spine	
53E-86NL29		long bone	
53E-86NL29		vert, thoracic	
53E-86NL29		Vert	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
53E-86NL29	lm							Indeterminate	Skull		11	fragme	54
53E-86NL29	lm							Indeterminate	indeterminate		14	fragme	31
53E-86NL29	mm							Indeterminate	rib/spine		6	fragme	3
53E-86NL29	mm							Indeterminate	long bone		16	fragme	12
53E-86NL29	sm/bird					sm/bird		Indeterminate	long bone		1	fragme	0
53E-86NL29	unident							indeterminate	indeterminate			fragme	14
94.84E-16.93NF1	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx	Right	1	Comple	24
94.84E-16.93NF1	lm							Fused	vert, cervical		1	1/4 - 1/	23
94.84E-16.93NF1	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer			Molar		1	Comple	8
94.84E-16.93NF1	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer			Incisor	Left	2	Comple	1
94.84E-16.93NF1	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	Maxilla		1	fragme	23
94.84E-16.93NF1	lm							indeterminate	Mandible		1	fragme	28
94.84E-16.93NF1	lm							Unerupted	Molar		1	fragme	1
94.84E-16.93NF1	lm							indeterminate	long bone		6	fragme	31
94.84E-16.93NF1	mm						Shaft	indeterminate	Femur		1	<1/4	1
94.84E-16.93NF1	mm							indeterminate	long bone		11	fragme	9
94.84E-16.93NF1	mm							fused	Costal Cartilage		1	fragme	1
94.84E-16.93NF1	mm							indeterminate	rib/spine		8	fragme	2
94.84E-16.93NF1	unident							indeterminate	indeterminate			fragme	2
94.84E-16.93NF1	Aves					L bird	Proxim	indeterminate	Carpometacarpus		1	<1/4	0
94.84E-16.93NF2	mm							indeterminate	long bone		7	fragme	9
94.84E-16.93NF2	mm							indeterminate	indeterminate		4	fragme	3
94.84E-16.93NF2	mm							indeterminate	Rib		1	fragme	3
94.84E-16.93NF2	lm							indeterminate	Rib		1	fragme	5
94.84E-16.93NF2	lm							Indeterminate	vert, cervical		1	<1/4	1
94.84E-16.93NF2	lm							Unfused	vert, cervical		1	<1/4	1
94.84E-16.93NF2	lm								Molar		1	fragme	1
94.84E-16.93NF2	lm							indeterminate	long bone		4	fragme	7
94.84E-16.93NF2	lm							indeterminate	indeterminate		6	fragme	6
94.84E-16.93NF2	Reptilia	Testudines				Turtle		Fused	long bone		2	fragme	2
94.84E-16.93NF2	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare	Proxim	Fused	Femur		1	Comple	4
94.84E-16.93NF2	unident							indeterminate	indeterminate			fragme	2
94.84E-16.93NL0	lm							indeterminate	rib/spine		8	fragme	3
94.84E-16.93NL0	lm							indeterminate	long bone		34	fragme	13
94.84E-16.93NL0	mm							Indeterminate	rib/spine		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
53E-86NL29		Skull	
53E-86NL29		indeterminate	b=4
53E-86NL29		rib/spine	
53E-86NL29		long bone	
53E-86NL29	sm/bird	long bone	
53E-86NL29		indeterminate	
94.84E-16.93NF1	zebu/buffalo	3rd Phalanx	DLS 63.3 Ld 49.0 Mbs 23.8 mm
94.84E-16.93NF1		vert, cervical	
94.84E-16.93NF1	sheep/goat/de	Molar	M1 or M2 with light wear
94.84E-16.93NF1	sheep/goat/de	Incisor	I2 or I3
94.84E-16.93NF1	pig	Maxilla	With 2 Molars
94.84E-16.93NF1		Mandible	
94.84E-16.93NF1		Molar	
94.84E-16.93NF1		long bone	b=3
94.84E-16.93NF1		Femur	
94.84E-16.93NF1		long bone	b=2
94.84E-16.93NF1		Costal Cartilage	
94.84E-16.93NF1		rib/spine	b=1
94.84E-16.93NF1		indeterminate	b=4
94.84E-16.93NF1	L bird	Carpometacarpus	
94.84E-16.93NF2		long bone	b=1
94.84E-16.93NF2		indeterminate	
94.84E-16.93NF2		Rib	
94.84E-16.93NF2		Rib	
94.84E-16.93NF2		vert, cervical	
94.84E-16.93NF2		vert, cervical	
94.84E-16.93NF2		Molar	
94.84E-16.93NF2		long bone	b=2
94.84E-16.93NF2		indeterminate	
94.84E-16.93NF2	Turtle	long bone	
94.84E-16.93NF2	Indian Hare	Femur	
94.84E-16.93NF2		indeterminate	b=3
94.84E-16.93NL0		rib/spine	c=3
94.84E-16.93NL0		long bone	c=10
94.84E-16.93NL0		rib/spine	c=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL0	mm							Indeterminate	long bone		5	fragme	1
94.84E-16.93NL0	unident							Indeterminate	indeterminate			fragme	4
94.84E-16.93NL0	Osteichthyes	Siluriformes	Ictaluridae			catfish		Fused	Dorsal Spine		1	Comple	0
94.84E-16.93NL1	unident							Indeterminate	indeterminate			fragme	19
94.84E-16.93NL1	Mammalia	Primates				S primate? cf. maca		Fused	Calcaneus		1	Comple	1
94.84E-16.93NL1	lm							Indeterminate	long bone		49	fragme	121
94.84E-16.93NL1	lm							Indeterminate	rib/spine		8	fragme	31
94.84E-16.93NL1	lm							Indeterminate	indeterminate		23	fragme	35
94.84E-16.93NL1	mm							Indeterminate	long bone		4	fragme	3
94.84E-16.93NL1	mm							Indeterminate	rib/spine		3	fragme	2
94.84E-16.93NL1	Mammalia								Tooth		2	fragme	1
94.84E-16.93NL10	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	Maxilla	Right	1	fragme	18
94.84E-16.93NL10	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	Maxilla	Right	1	fragme	46
94.84E-16.93NL10	Mammalia	Artiodactyla	Bovidae			L bovid	Proxim	Indeterminate	Ulna	Right	1	<1/4	13
94.84E-16.93NL10	Mammalia	Artiodactyla	Bovidae			L bovid	Proxim	fused	Ulna	Right	1	fragme	9
94.84E-16.93NL10	Mammalia	Artiodactyla	Bovidae			L bovid	Shaft	fused	Tibia	Right	1	fragme	21
94.84E-16.93NL10	Mammalia	Artiodactyla	Bovidae			bovid		Recently Fus	Metapodial		1	<1/4	4
94.84E-16.93NL10	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	1st Phalanx		1	3/4+	31
94.84E-16.93NL10	Mammalia	Artiodactyla	Bovidae			Bovid		Fused	2nd Phalanx		1	3/4+	14
94.84E-16.93NL10	lm							fused	Mandible	Right	1	fragme	3
94.84E-16.93NL10	lm						Lower		Premolar	Right	1	Comple	3
94.84E-16.93NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Unfused	Humerus	Left	1	1/2 - 3/	6
94.84E-16.93NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Upper		Premolar		1	Comple	1
94.84E-16.93NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Arch	fused	Vert		1	1/4 - 1/	1
94.84E-16.93NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	Radial carpal		1	Comple	2
94.84E-16.93NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Unfused	Ischium	Right	1	3/4+	3
94.84E-16.93NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Shaft	Indeterminate	Femur		2	<1/4	3
94.84E-16.93NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Indeterminate	Radius	Left	1	<1/4	4
94.84E-16.93NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Indeterminate	Tibia	Left	1	<1/4	3
94.84E-16.93NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Shaft	fused	Metapodial		2	<1/4	7
94.84E-16.93NL10	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	Astragalus		1	<1/4	0
94.84E-16.93NL10	sm						Distal	indeterminate	Scapula	Left	1	fragme	0
94.84E-16.93NL10	Reptilia	Squamata	Crotalidae			Poisonous snake far		Fused	Vert		1	Comple	0
94.84E-16.93NL10	Reptilia	Sauria				L lizard		indeterminate	Skull		1	fragme	3
94.84E-16.93NL10	lm							indeterminate	rib/spine		20	fragme	51

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL0		long bone	
94.84E-16.93NL0		indeterminate	c=20
94.84E-16.93NL0	catfish	Dorsal Spine	pectoral or dorsal spine, probably catfish
94.84E-16.93NL1		indeterminate	c=1
94.84E-16.93NL1	S primate? cf.	Calcaneus	length 22.4 mm width of facets 10.9 mm
94.84E-16.93NL1		long bone	b=2
94.84E-16.93NL1		rib/spine	
94.84E-16.93NL1		indeterminate	b=1, c=1
94.84E-16.93NL1		long bone	b=2
94.84E-16.93NL1		rib/spine	c=1
94.84E-16.93NL1		Tooth	
94.84E-16.93NL10	zebu	Maxilla	dev=adult, moderate wear on Molar
94.84E-16.93NL10	zebu	Maxilla	dev=subadult, light wear on molar (M1 or M2), roots open
94.84E-16.93NL10	L bovid	Ulna	
94.84E-16.93NL10	L bovid	Ulna	b=1
94.84E-16.93NL10	L bovid	Tibia	
94.84E-16.93NL10	bovid	Metapodial	dev=subadult
94.84E-16.93NL10	zebu/buffalo	1st Phalanx	
94.84E-16.93NL10	Bovid	2nd Phalanx	
94.84E-16.93NL10		Mandible	
94.84E-16.93NL10		Premolar	dev=subadult, Pm1 or Pm2
94.84E-16.93NL10	sheep/goat/de	Humerus	
94.84E-16.93NL10	sheep/goat/de	Premolar	worn
94.84E-16.93NL10	sheep/goat/de	Vert	
94.84E-16.93NL10	sheep/goat/de	Radial carpal	b=1
94.84E-16.93NL10	sheep/goat/de	Ischium	
94.84E-16.93NL10	sheep/goat/de	Femur	
94.84E-16.93NL10	sheep/goat/de	Radius	
94.84E-16.93NL10	sheep/goat/de	Tibia	
94.84E-16.93NL10	sheep/goat/de	Metapodial	cg=1
94.84E-16.93NL10	sheep/goat/de	Astragalus	
94.84E-16.93NL10		Scapula	
94.84E-16.93NL10	Poisonous sna	Vert	Family ID based on shape of vert
94.84E-16.93NL10	L lizard	Skull	photographed
94.84E-16.93NL10		rib/spine	b=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL10	lm							Unfused	Vert		1	<1/4	5
94.84E-16.93NL10	lm						Epiphy	Unfused	Vert		1	<1/4	1
94.84E-16.93NL10	lm								Molar		7	fragme	3
94.84E-16.93NL10	lm							indeterminate	long bone		26	fragme	60
94.84E-16.93NL10	lm							Indeterminate	indeterminate		43	fragme	54
94.84E-16.93NL10	lm							indeterminate	Skull		7	fragme	23
94.84E-16.93NL10	mm							indeterminate	rib/spine		25	fragme	26
94.84E-16.93NL10	mm							indeterminate	indeterminate		23	fragme	16
94.84E-16.93NL10	mm							indeterminate	long bone		34	fragme	43
94.84E-16.93NL10	mm							indeterminate	Skull		7	fragme	23
94.84E-16.93NL10	sm							indeterminate	Rib		2	fragme	1
94.84E-16.93NL10	sm							indeterminate	Mandible		1	<1/4	0
94.84E-16.93NL10	sm							indeterminate	long bone		5	fragme	3
94.84E-16.93NL10	Aves	Galliformes	Phasianidae			game bird		Fused	Carpometacarpus		1	Comple	0
94.84E-16.93NL10	unident							Indeterminate	indeterminate			fragme	26
94.84E-16.93NL10	Aves					bird		Fused	Tibiotarsus		1	Comple	1
94.84E-16.93NL10	Aves					bird		Indeterminate	long bone		1	fragme	0
94.84E-16.93NL10	Aves					bird		Indeterminate	Skull		1	fragme	0
94.84E-16.93NL10	lm							Indeterminate	rib/spine		2	fragme	3
94.84E-16.93NL10	lm							Indeterminate	long bone		3	fragme	4
94.84E-16.93NL11	Aves					bird		Indeterminate	long bone		4	fragme	1
94.84E-16.93NL11	Aves					bird		Indeterminate	Skull		9	fragme	2
94.84E-16.93NL11	Aves					bird		Indeterminate	Rib		1	fragme	0
94.84E-16.93NL11	Aves					bird		Indeterminate	Sternum		1	<1/4	0
94.84E-16.93NL11	Aves	Galliformes	Phasianidae			game bird	Distal	fused	Femur		1	1/4	0
94.84E-16.93NL11	Aves					bird			Eggshell			fragme	0
94.84E-16.93NL11	unident							Indeterminate	indeterminate			fragme	47
94.84E-16.93NL11	Mammalia	Artiodactyla	Cervidae	Axis	axis	Chital			Antler		2	fragme	7
94.84E-16.93NL11	lm							Indeterminate	long bone		37	fragme	177
94.84E-16.93NL11	lm							Indeterminate	rib/spine		53	fragme	120
94.84E-16.93NL11	lm							Indeterminate	indeterminate		48	fragme	51
94.84E-16.93NL11	lm							Indeterminate	Skull		11	fragme	20
94.84E-16.93NL11	lm							Indeterminate	Tooth		8	fragme	7
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Unfused	Metatarsal		1	1/4 - 1/	25
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Fused	Radius	Right	1	<1/4	20

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL10		Vert	
94.84E-16.93NL10		Vert	
94.84E-16.93NL10		Molar	b=5
94.84E-16.93NL10		long bone	b=6
94.84E-16.93NL10		indeterminate	b=8
94.84E-16.93NL10		Skull	b=2
94.84E-16.93NL10		rib/spine	b=3
94.84E-16.93NL10		indeterminate	b=5
94.84E-16.93NL10		long bone	b=5
94.84E-16.93NL10		Skull	b=2
94.84E-16.93NL10		Rib	
94.84E-16.93NL10		Mandible	
94.84E-16.93NL10		long bone	
94.84E-16.93NL10	game bird	Carpometacarpus	
94.84E-16.93NL10		indeterminate	
94.84E-16.93NL10	bird	Tibiotarsus	not measured
94.84E-16.93NL10	bird	long bone	
94.84E-16.93NL10	bird	Skull	
94.84E-16.93NL10		rib/spine	b=1
94.84E-16.93NL10		long bone	b=3
94.84E-16.93NL11	bird	long bone	
94.84E-16.93NL11	bird	Skull	
94.84E-16.93NL11	bird	Rib	
94.84E-16.93NL11	bird	Sternum	
94.84E-16.93NL11	game bird	Femur	
94.84E-16.93NL11	bird	Eggshell	
94.84E-16.93NL11		indeterminate	
94.84E-16.93NL11	Chital	Antler	
94.84E-16.93NL11		long bone	b=1
94.84E-16.93NL11		rib/spine	b=6
94.84E-16.93NL11		indeterminate	b=4
94.84E-16.93NL11		Skull	b=1
94.84E-16.93NL11		Tooth	b=1
94.84E-16.93NL11	zebu/buffalo	Metatarsal	
94.84E-16.93NL11	zebu/buffalo	Radius	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Shaft	fused	Tibia	Left	1	fragme	15
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	2nd Phalanx	Right	1	Comple	14
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	vert, caudal		1	Comple	3
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	fused	Calcaneus		1	fragme	15
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Unfused	vert, caudal		1	Comple	2
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx		1	1/4	2
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Shaft	Indeterminate	Femur		1	<1/4	23
94.84E-16.93NL11	mm							Indeterminate	Vert		12	fragme	21
94.84E-16.93NL11	mm							Indeterminate	long bone		34	fragme	25
94.84E-16.93NL11	mm							indeterminate	Skull		17	fragme	17
94.84E-16.93NL11	mm							indeterminate	rib/spine		40	fragme	30
94.84E-16.93NL11	mm							indeterminate	indeterminate		48	fragme	24
94.84E-16.93NL11	mm							indeterminate	indeterminate		1	fragme	1
94.84E-16.93NL11	Mammalia	Rodentia	Hystricidae	Hystrix	indica	Indian porcu	Distal	Fused	Tibia		1	3/4+	11
94.84E-16.93NL11	Mammalia	Artiodactyla	Suidae	Sus		pig	Upper		Premolar	Left	1	Comple	2
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Lower		P3	Left	1	Comple	1
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		Unerupted	Incisor		3	Comple	1
94.84E-16.93NL11	Mammalia	Artiodactyla	Cervidae			deer sp.		Fused	3rd Phalanx		1	Comple	3
94.84E-16.93NL11	lm						Proxim	indeterminate	1st Phalanx		1	1/4	2
94.84E-16.93NL11	lm							Indeterminate	Skull		1	1/2 - 3/	2
94.84E-16.93NL11	mm							Fused	Petris Temporal		1	fragme	1
94.84E-16.93NL11	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		Fused	Innominate	Right	1	1/4	1
94.84E-16.93NL11	Mammalia							indeterminate	long bone		1	fragme	2
94.84E-16.93NL11	Mammalia	Rodentia				rat/mouse		Fused	Maxilla	Right	2	1/2	0
94.84E-16.93NL11	Mammalia	Rodentia				rat/mouse	Upper		Incisor		1	1/2 - 3/	0
94.84E-16.93NL11	Reptilia	Squamata				snake		Fused	Vert		1	Comple	7
94.84E-16.93NL11	Reptilia	Squamata				snake		Fused	Rib		2	1/2 - 3/	0
94.84E-16.93NL11	Reptilia	Testudines	Emydidae			box turtle		Fused	Ischium	Right	1	Comple	1
94.84E-16.93NL11	Reptilia	Testudines	Emydidae			box turtle	Distal	Fused	Femur		1	1/2	0
94.84E-16.93NL11	sm							Indeterminate	long bone		3	fragme	1
94.84E-16.93NL11	sm							Indeterminate	rib/spine		3	fragme	1
94.84E-16.93NL11	Mammalia	Carnivora	Herpestidae	Herpestes	edwardsii	mongoose	Proxim	fused	Radius	Left	1	1/2	0
94.84E-16.93NL11	Mammalia	Carnivora	Herpestidae	Herpestes	edwardsii	mongoose		fused	Skull		3	fragme	1
94.84E-16.93NL11	sm						Distal	Indeterminate	Scapula		1	1/4	1
94.84E-16.93NL11	Mammalia							Indeterminate	indeterminate		2	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL11	zebu/buffalo	Tibia	
94.84E-16.93NL11	zebu/buffalo	2nd Phalanx	Bp 27.6 Bd 21.6 GL 42.9
94.84E-16.93NL11	zebu/buffalo	vert, caudal	dev=subadult
94.84E-16.93NL11	zebu/buffalo	Calcaneus	cut=1
94.84E-16.93NL11	zebu/buffalo	vert, caudal	
94.84E-16.93NL11	zebu/buffalo	3rd Phalanx	
94.84E-16.93NL11	zebu/buffalo	Femur	
94.84E-16.93NL11		Vert	b=2
94.84E-16.93NL11		long bone	b=3
94.84E-16.93NL11		Skull	
94.84E-16.93NL11		rib/spine	b=2
94.84E-16.93NL11		indeterminate	b=1, c=1
94.84E-16.93NL11		indeterminate	dev=fetal/newborn
94.84E-16.93NL11	Indian porcupi	Tibia	cut=1
94.84E-16.93NL11	pig	Premolar	moderately worn
94.84E-16.93NL11	sheep/goat	P3	
94.84E-16.93NL11	sheep/goat	Incisor	recently or unerupted incisors
94.84E-16.93NL11	deer sp.	3rd Phalanx	DLS 37.5 Ld 30.2 MBS 8.9
94.84E-16.93NL11		1st Phalanx	
94.84E-16.93NL11		Skull	
94.84E-16.93NL11		Petris Temporal	
94.84E-16.93NL11	sheep/goat	Innominate	
94.84E-16.93NL11		long bone	w=1, bone stylus, approx 6 cm long x .5 cm wide
94.84E-16.93NL11	rat/mouse	Maxilla	
94.84E-16.93NL11	rat/mouse	Incisor	
94.84E-16.93NL11	snake	Vert	
94.84E-16.93NL11	snake	Rib	b=2
94.84E-16.93NL11	box turtle	Ischium	
94.84E-16.93NL11	box turtle	Femur	
94.84E-16.93NL11		long bone	
94.84E-16.93NL11		rib/spine	b=2
94.84E-16.93NL11	mongoose	Radius	
94.84E-16.93NL11	mongoose	Skull	
94.84E-16.93NL11		Scapula	
94.84E-16.93NL11		indeterminate	dev=fetal/newborn

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL11	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Supraethmoid	Right	1	1/2	2
94.84E-16.93NL11	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Quadrate	Left	1	Comple	3
94.84E-16.93NL11	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Frontal		1	fragme	2
94.84E-16.93NL11	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Vert		1	Comple	1
94.84E-16.93NL11	Osteichthyes	Siluriformes	Ictaluridae			catfish?		fused	ceratohyal		1	fragme	0
94.84E-16.93NL11	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Post-temporal		1	Comple	0
94.84E-16.93NL11	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	ceratohyal		1	Comple	0
94.84E-16.93NL11	Osteichthyes					fish		Indeterminate	Vert		1	fragme	0
94.84E-16.93NL11	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Cleithrum	Right	1	Comple	0
94.84E-16.93NL11	Osteichthyes					fish		Indeterminate	Skull		1	fragme	0
94.84E-16.93NL11	Osteichthyes					fish		Indeterminate	Rib			Comple	1
94.84E-16.93NL11	Osteichthyes					fish		Indeterminate	dorsal spine		1	Comple	0
94.84E-16.93NL11	unident							Indeterminate	indeterminate			fragme	2
94.84E-16.93NL12	unident							Indeterminate	indeterminate			fragme	87
94.84E-16.93NL12	lm							Indeterminate	Acetabulum		1	fragme	28
94.84E-16.93NL12	mm							Indeterminate	Skull		3	fragme	11
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid	Distal	Fused	Metatarsal		1	1/4 - 1/	95
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid		fused	Maxilla	Right	1	fragme	48
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid	Upper		Molar		1	fragme	26
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid			Premolar	Right	1	Comple	5
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			L bovid		fused	Mandible	Left	1	fragme	31
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid		fused	Zygomatic	Left	1	fragme	9
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			L bovid		fused	Mandible	Left	1	<1/4	21
94.84E-16.93NL12	lm							Fused	Vert		1	1/2 - 3/	40
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid	Distal	Fused	Radius	Right	1	<1/4	10
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid	Distal	Unfused	Ischium	Right	1	1/2 - 3/	29
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid	Upper		Premolar		1	fragme	7
94.84E-16.93NL12	lm							indeterminate	indeterminate		1	fragme	13
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			L bovid	Proxim	Fused	Ulna		1	fragme	14
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			L bovid	Arch	Fused	vert, cervical		1	<1/4	5
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid		Fused	Vert		1	fragme	6
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid		Fused	Costal Cartilage		1	fragme	3
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			L bovid	Proxim	Fused	Metacarpal	Left	1	<1/4	13
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid	Proxim	Unfused	1st Phalanx		1	<1/4	3
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid	Distal	Indeterminate	1st Phalanx		1	<1/4	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL11	catfish	Supraethmoic	b=1, between 50 - 60 cm standard length
94.84E-16.93NL11	catfish	Quadrate	
94.84E-16.93NL11	catfish	Frontal	
94.84E-16.93NL11	catfish	Vert	
94.84E-16.93NL11	catfish?	ceratohyal	or catfish palantine?
94.84E-16.93NL11	catfish	Post-temporal	
94.84E-16.93NL11	catfish	ceratohyal	
94.84E-16.93NL11	fish	Vert	40 - 60 cm standard length
94.84E-16.93NL11	catfish	Cleithrum	b=1, 25 - 30 cm standard length
94.84E-16.93NL11	fish	Skull	20 - 40 cm standard length
94.84E-16.93NL11	fish	Rib	b=1, 20 - 40 cm standard length
94.84E-16.93NL11	fish	dorsal spine	b=1, 20 - 40 cm standard length
94.84E-16.93NL11		indeterminate	
94.84E-16.93NL12		indeterminate	b=4
94.84E-16.93NL12		Acetabulum	dev=old adult, arthritic
94.84E-16.93NL12		Skull	
94.84E-16.93NL12	bovid	Metatarsal	
94.84E-16.93NL12	bovid	Maxilla	with worn M
94.84E-16.93NL12	bovid	Molar	dev=adult, M1, M2 or M3
94.84E-16.93NL12	bovid	Premolar	moderate wear
94.84E-16.93NL12	L bovid	Mandible	
94.84E-16.93NL12	bovid	Zygomatic	with molar
94.84E-16.93NL12	L bovid	Mandible	
94.84E-16.93NL12		Vert	pathological? Bony growths on dorsal side
94.84E-16.93NL12	bovid	Radius	
94.84E-16.93NL12	bovid	Ischium	
94.84E-16.93NL12	bovid	Premolar	dev=old adult
94.84E-16.93NL12		indeterminate	
94.84E-16.93NL12	L bovid	Ulna	
94.84E-16.93NL12	L bovid	vert, cervical	
94.84E-16.93NL12	bovid	Vert	
94.84E-16.93NL12	bovid	Costal Cartilage	
94.84E-16.93NL12	L bovid	Metacarpal	
94.84E-16.93NL12	bovid	1st Phalanx	
94.84E-16.93NL12	bovid	1st Phalanx	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid		Fused	Carpal/tarsal		1	Comple	3
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid			Molar		15	fragme	11
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae			bovid	Epiphy	Unfused	Rib		1	<1/4	1
94.84E-16.93NL12	lm							Indeterminate	Mandible		2	fragme	8
94.84E-16.93NL12	lm							Indeterminate	long bone		58	fragme	163
94.84E-16.93NL12	lm							Indeterminate	Skull		25	fragme	103
94.84E-16.93NL12	lm							Indeterminate	indeterminate		112	fragme	146
94.84E-16.93NL12	lm							Indeterminate	rib/spine		61	fragme	105
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	Fused	Ulna		1	fragme	4
94.84E-16.93NL12	Mammalia	Artiodactyla	Suidae	Sus		pig		Unfused	1st Tarsal		1	3/4+	8
94.84E-16.93NL12	lm						Arch	Indeterminate	vert, lumbar		1	1/4	10
94.84E-16.93NL12	Mammalia	Artiodactyla	Cervidae	Cervus or Axis		Sambar or Chital		fused	Petris Temporal		1	Comple	7
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	Mandible	Left	1	fragme	5
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		fused	Mandible	Left	1	fragme	2
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Upper		Premolar		1	Comple	1
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		fused	scapula		1	<1/4	2
94.84E-16.93NL12	mm						Shaft	Indeterminate	Humerus		1	<1/4	6
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Antilope		sheep/goat/b	Distal	Fusing	Humerus	Left	1	1/4 - 1/	7
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Proxim	fused	Ulna	Left	1	1/2 - 3/	20
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Shaft	fused	Radius		1	<1/4	6
94.84E-16.93NL12	mm						Shaft	Indeterminate	Metacarpal		2	fragme	5
94.84E-16.93NL12	mm							fused	Petris Temporal		1	fragme	0
94.84E-16.93NL12	mm								Tooth root		1	fragme	0
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		fused	Ischium	Distal	1	1/4 - 1/	3
94.84E-16.93NL12	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Shaft	Indeterminate	Femur		1	fragme	2
94.84E-16.93NL12	sm							Unfused	vert, caudal		1	Comple	0
94.84E-16.93NL12	mm							Unfused	Vert		1	<1/4	4
94.84E-16.93NL12	mm							Indeterminate	Vert		2	<1/4	3
94.84E-16.93NL12	mm								Tooth		2	fragme	0
94.84E-16.93NL12	mm							Indeterminate	Skull		9	fragme	6
94.84E-16.93NL12	mm							Fused	Petris Temporal		2	fragme	0
94.84E-16.93NL12	mm							indeterminate	long bone		80	fragme	60
94.84E-16.93NL12	mm							indeterminate	indeterminate		61	fragme	33
94.84E-16.93NL12	mm							fused	Costal Cartilage		4	fragme	2
94.84E-16.93NL12	mm							indeterminate	rib/spine		40	fragme	26

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL12	bovid	Carpal/tarsal	b=1
94.84E-16.93NL12	bovid	Molar	
94.84E-16.93NL12	bovid	Rib	
94.84E-16.93NL12		Mandible	
94.84E-16.93NL12		long bone	b=2
94.84E-16.93NL12		Skull	b=1
94.84E-16.93NL12		indeterminate	b=16, c=1
94.84E-16.93NL12		rib/spine	b=5, c=1
94.84E-16.93NL12	zebu	Ulna	dev=subadult
94.84E-16.93NL12	pig	1st Tarsal	
94.84E-16.93NL12		vert, lumbar	
94.84E-16.93NL12	Sambar or Chi	Petris Temporal	
94.84E-16.93NL12	zebu	Mandible	
94.84E-16.93NL12	zebu	Mandible	dev=fetal/newborn, incomplete ossification
94.84E-16.93NL12	sheep/goat	Premolar	worn
94.84E-16.93NL12	sheep/goat	scapula	
94.84E-16.93NL12		Humerus	
94.84E-16.93NL12	sheep/goat/bla	Humerus	hack=1
94.84E-16.93NL12	goat	Ulna	
94.84E-16.93NL12	goat	Radius	
94.84E-16.93NL12		Metacarpal	dev=subadult
94.84E-16.93NL12		Petris Temporal	
94.84E-16.93NL12		Tooth root	
94.84E-16.93NL12	sheep/goat	Ischium	dev=fetal/newborn, rg=1
94.84E-16.93NL12	sheep/goat	Femur	dev=subadult
94.84E-16.93NL12		vert, caudal	long caudal vert for animal with long tail
94.84E-16.93NL12		Vert	
94.84E-16.93NL12		Vert	
94.84E-16.93NL12		Tooth	
94.84E-16.93NL12		Skull	b=1
94.84E-16.93NL12		Petris Temporal	
94.84E-16.93NL12		long bone	b=10, c=1
94.84E-16.93NL12		indeterminate	b=6, c=2
94.84E-16.93NL12		Costal Cartilage	
94.84E-16.93NL12		rib/spine	b=6

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPL	grams
94.84E-16.93NL12	Reptilia	Testudines				turtle		fused	long bone		4	fragme	4
94.84E-16.93NL12	Reptilia	Squamata				snake		fused	Vert		4	fragme	1
94.84E-16.93NL12	Reptilia	Testudines				turtle		fused	Vert		1	fragme	1
94.84E-16.93NL12	Reptilia					L reptile		indeterminate	Skull		1	fragme	1
94.84E-16.93NL12	Mammalia	Rodentia				rat/mouse		Fused	Atlas		1	Comple	0
94.84E-16.93NL12	Mammalia	Rodentia				rat/mouse	Proxim	Unfused	Tibia	Right	1	fragme	0
94.84E-16.93NL12	Mammalia	Rodentia				rat/mouse		Fused	Innominate	Left	1	Comple	0
94.84E-16.93NL12	Mammalia	Rodentia				rat/mouse		Fused	Mandible	Left	1	fragme	0
94.84E-16.93NL12	Mammalia	Lagomorpha	Leporidae			Indian Hare			Molar		1	fragme	0
94.84E-16.93NL12	Osteichthyes					fish		Fused	Pelvic Girdle		1	fragme	0
94.84E-16.93NL12	Osteichthyes	Siluriformes	Ictaluridae			catfish		Fused	Urohyal		1	fragme	0
94.84E-16.93NL12	Osteichthyes	Siluriformes	Ictaluridae			catfish		Fused	Maxilla		1	fragme	0
94.84E-16.93NL12	sm							Indeterminate	long bone		5	fragme	1
94.84E-16.93NL12	sm							Unfused	Vert		1	fragme	0
94.84E-16.93NL12	sm						Proxim	Indeterminate	Metapodial		1	fragme	0
94.84E-16.93NL12	sm							Indeterminate	Rib		3	fragme	1
94.84E-16.93NL12	sm							Indeterminate	Skull		12	fragme	3
94.84E-16.93NL12	Osteichthyes					fish		Indeterminate	Skull		4	fragme	1
94.84E-16.93NL12	Osteichthyes	Perciformes				bass/sunfish/perch		Fused	dorsal spine		1	Comple	0
94.84E-16.93NL12	Osteichthyes					fish		Indeterminate	rib/spine		17	fragme	2
94.84E-16.93NL12	lm							Indeterminate	rib/spine		1	fragme	1
94.84E-16.93NL12	lm							Indeterminate	rib/spine		2	fragme	1
94.84E-16.93NL12	lm							Indeterminate	long bone		1	fragme	1
94.84E-16.93NL12	Aves					bird			Shell			fragme	3
94.84E-16.93NL12	Aves					S bird		fused	3rd Phalanx		1	Comple	0
94.84E-16.93NL12	Aves					bird		Indeterminate	long bone		7	fragme	1
94.84E-16.93NL12	lm							Indeterminate	long bone		4	fragme	8
94.84E-16.93NL12	lm							Indeterminate	Skull		1	fragme	1
94.84E-16.93NL12	lm							Indeterminate	rib/spine		3	fragme	5
94.84E-16.93NL12	lm							Indeterminate	Skull		1	fragme	6
94.84E-16.93NL12	lm							Indeterminate	long bone		3	fragme	6
94.84E-16.93NL12	lm/mm							Indeterminate	indeterminate		2	fragme	2
94.84E-16.93NL13	Aves					bird			eggshell			fragment	
94.84E-16.93NL13	unident							Indeterminate	indeterminate			fragme	59
94.84E-16.93NL13	lm							Indeterminate	long bone		42	fragme	111

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL12	turtle	long bone	
94.84E-16.93NL12	snake	Vert	
94.84E-16.93NL12	turtle	Vert	
94.84E-16.93NL12	L reptile	Skull	
94.84E-16.93NL12	rat/mouse	Atlas	smaller than Bandicoot rat; possibly intrusive
94.84E-16.93NL12	rat/mouse	Tibia	smaller than Bandicoot rat; possibly intrusive
94.84E-16.93NL12	rat/mouse	Innominate	smaller than Bandicoot rat; possibly intrusive
94.84E-16.93NL12	rat/mouse	Mandible	smaller than Bandicoot rat; possibly intrusive
94.84E-16.93NL12	Indian Hare	Molar	
94.84E-16.93NL12	fish	Pelvic Girdle	
94.84E-16.93NL12	catfish	Urohyal	standard length 40 - 45 cm
94.84E-16.93NL12	catfish	Maxilla	
94.84E-16.93NL12		long bone	
94.84E-16.93NL12		Vert	dev=fetal/newborn
94.84E-16.93NL12		Metapodial	
94.84E-16.93NL12		Rib	b=1
94.84E-16.93NL12		Skull	
94.84E-16.93NL12	fish	Skull	
94.84E-16.93NL12	bass/sunfish/p	dorsal spine	
94.84E-16.93NL12	fish	rib/spine	b=7
94.84E-16.93NL12		rib/spine	drill=1, worked bone, circular cut-out in bone table, approx .5 cm diameter
94.84E-16.93NL12		rib/spine	drill=2, worked bone, circular cut-out in bone table, approx .5 cm diameter
94.84E-16.93NL12		long bone	drill=1, worked bone, circular cut-out in bone table, approx .5 cm diameter
94.84E-16.93NL12	bird	Shell	
94.84E-16.93NL12	S bird	3rd Phalanx	
94.84E-16.93NL12	bird	long bone	
94.84E-16.93NL12		long bone	b=2, cut=3
94.84E-16.93NL12		Skull	
94.84E-16.93NL12		rib/spine	
94.84E-16.93NL12		Skull	
94.84E-16.93NL12		long bone	b=2
94.84E-16.93NL12		indeterminate	b=1
94.84E-16.93NL13	bird	eggshell	
94.84E-16.93NL13		indeterminate	b=6, c=2
94.84E-16.93NL13		long bone	b=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL13	lm							Indeterminate	rib/spine		52	fragme	226
94.84E-16.93NL13	lm							fused	Costal Cartilage		1	fragme	4
94.84E-16.93NL13	lm							Indeterminate	Skull		21	fragme	55
94.84E-16.93NL13	lm							Indeterminate	indeterminate		63	fragme	73
94.84E-16.93NL13	mm							Indeterminate	long bone		57	fragme	65
94.84E-16.93NL13	mm							Indeterminate	rib/spine		36	fragme	28
94.84E-16.93NL13	mm							Fused	Costal Cartilage		1	fragme	3
94.84E-16.93NL13	mm							Indeterminate	Skull		7	fragme	6
94.84E-16.93NL13	mm							Indeterminate	indeterminate		33	fragme	21
94.84E-16.93NL13	Mammalia	Artiodactyla	Cervidae	Axis	axis	Chital			Antler		1	fragme	30
94.84E-16.93NL13	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	Mandible	Right	1	fragme	273
94.84E-16.93NL13	lm							fused	Petris Temporal		1	fragme	21
94.84E-16.93NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Skull		2	fragme	24
94.84E-16.93NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	intermediate (	Right	1	Comple	31
94.84E-16.93NL13	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Lateral Malleolus		1	Comple	26
94.84E-16.93NL13	lm							fused	Sesamoid		2	Comple	4
94.84E-16.93NL13	lm						Shaft	indeterminate	Femur	Left	1	1/4	19
94.84E-16.93NL13	lm							fused	Petris Temporal		1	fragme	2
94.84E-16.93NL13	lm								Tooth		4	fragme	3
94.84E-16.93NL13	lm							Unfused	Vert		1	1/4	12
94.84E-16.93NL13	lm							Indeterminate	Carpal/tarsal		1	fragme	12
94.84E-16.93NL13	lm						Proxim	Indeterminate	Femur/Humerus		1	1/2	16
94.84E-16.93NL13	lm						Proxim	Indeterminate	Ulna	Left	1	1/4	9
94.84E-16.93NL13	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Fused	Metacarpal		1	1/2	6
94.84E-16.93NL13	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		Fused	Astragalus	Right	1	Comple	11
94.84E-16.93NL13	mm							Fused	Petris Temporal		1	fragme	1
94.84E-16.93NL13	mm							Unfused	Vert (T13 or L1)		1	3/4+	6
94.84E-16.93NL13	Mammalia	Artiodactyla		Ovis/Capra/Axis		sheep/goat/c	Distal	Fused	Tibia		1	1/2 - 3/	10
94.84E-16.93NL13	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Upper		M3		1	Comple	7
94.84E-16.93NL13	mm						Proxim	Indeterminate	1st Phalanx		1	1/2	1
94.84E-16.93NL13	Mammalia							Indeterminate	Scapula	Right	1	3/4+	2
94.84E-16.93NL13	mm						Proxim	Unfused	Femur		1	1/4	1
94.84E-16.93NL13	mm						Proxim	Indeterminate	Ulna		1	1/4	4
94.84E-16.93NL13	mm						Proxim	Indeterminate	Scapula	Left	1	1/2 - 3/	4
94.84E-16.93NL13	mm						Proxim	Indeterminate	Scapula	Right	1	1/2 - 3/	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL13		rib/spine	b=2, cut=2
94.84E-16.93NL13		Costal Cartilage	
94.84E-16.93NL13		Skull	1 piece mineralized ~20% extra weight
94.84E-16.93NL13		indeterminate	b=4
94.84E-16.93NL13		long bone	b=7
94.84E-16.93NL13		rib/spine	b=4
94.84E-16.93NL13		Costal Cartilage	
94.84E-16.93NL13		Skull	
94.84E-16.93NL13		indeterminate	b=1
94.84E-16.93NL13	Chital	Antler	w=1, worked into blunted, tapered instrument? 7 cm x 3 cm wide
94.84E-16.93NL13	zebu	Mandible	with M3 inplace: Length 38.4 mm, Breadth 17.4 mm
94.84E-16.93NL13		Petris Temporal	
94.84E-16.93NL13	zebu/buffalo	Skull	cut=1
94.84E-16.93NL13	zebu/buffalo	intermediate (	mineralized
94.84E-16.93NL13	zebu/buffalo	Lateral Malleolus	
94.84E-16.93NL13		Sesamoid	
94.84E-16.93NL13		Femur	
94.84E-16.93NL13		Petris Temporal	
94.84E-16.93NL13		Tooth	
94.84E-16.93NL13		Vert	
94.84E-16.93NL13		Carpal/tarsal	
94.84E-16.93NL13		Femur/Humerus	
94.84E-16.93NL13		Ulna	
94.84E-16.93NL13	sheep/goat	Metacarpal	split shaft
94.84E-16.93NL13	goat	Astragalus	Bd 21.2 GLe 32.1 GLm 29.7 Dl 18.7
94.84E-16.93NL13		Petris Temporal	
94.84E-16.93NL13		Vert (T13 or L1)	
94.84E-16.93NL13	sheep/goat/chi	Tibia	
94.84E-16.93NL13	goat	M3	
94.84E-16.93NL13		1st Phalanx	
94.84E-16.93NL13		Scapula	dev=fetal/newborn
94.84E-16.93NL13		Femur	
94.84E-16.93NL13		Ulna	
94.84E-16.93NL13		Scapula	
94.84E-16.93NL13		Scapula	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL13	mm						Arch	Indeterminate	vert, thoracic		1	fragme	1
94.84E-16.93NL13	mm						Proxim	Indeterminate	Ulna		1	<1/4	1
94.84E-16.93NL13	mm						Shaft	Indeterminate	Tibia	Right	1	<1/4	5
94.84E-16.93NL13	mm							Indeterminate	long bone		1	fragme	4
94.84E-16.93NL13	mm						Proxim	Indeterminate	Metacarpal		1	fragme	1
94.84E-16.93NL13	sm							Indeterminate	long bone		8	fragme	1
94.84E-16.93NL13	sm							Indeterminate	rib/spine		5	fragme	1
94.84E-16.93NL13	Mammalia	Rodentia				rat/mouse		fused	Tibia		3	1/2 - 3/	1
94.84E-16.93NL13	Mammalia	Rodentia				rat/mouse	Distal	fused	Radius		2	1/2 - 3/	0
94.84E-16.93NL13	Mammalia	Rodentia				rat/mouse		fused	Femur		1	Comple	0
94.84E-16.93NL13	Reptilia	Testudines	Emydidae			box turtle		fused	carapace		1	Comple	4
94.84E-16.93NL13	Reptilia	Testudines	Emydidae			box turtle		fused	carapace		2	Comple	6
94.84E-16.93NL13	Reptilia	Testudines	Emydidae			box turtle		fused	Carapace		3	Comple	4
94.84E-16.93NL13	Reptilia	Testudines				turtle		fused	Ilium	Right	1	fragme	0
94.84E-16.93NL13	Reptilia	Testudines				turtle		fused	Tibia/Fibula		1	fragme	0
94.84E-16.93NL13	Osteichthyes					fish		fused	Quadrate		1	Comple	0
94.84E-16.93NL13	Osteichthyes					fish		Indeterminate	rib/spine		5	fragme	0
94.84E-16.93NL13	Osteichthyes					fish		Fused	Hyomandibular		1	Comple	0
94.84E-16.93NL13	Reptilia	Testudines				turtle		Fused	Metapodial		1	Comple	0
94.84E-16.93NL13	Reptilia	Testudines				turtle		Fused	Humerus		1	Comple	1
94.84E-16.93NL13	Mammalia							Unfused	Vert		1	1/2	0
94.84E-16.93NL13	Mammalia							Unfused	Vert		2	fragme	1
94.84E-16.93NL13	Mammalia							Indeterminate	indeterminate		4	fragme	1
94.84E-16.93NL13	Reptilia	Squamata				snake		Fused	Vert		5	Comple	2
94.84E-16.93NL13	sm/bird					sm/bird		indeterminate	long bone		7	fragme	1
94.84E-16.93NL13	sm/bird					sm/bird		indeterminate	Skull		5	fragme	2
94.84E-16.93NL13	Mammalia	Rodentia				rat/mouse		indeterminate	Basioccipital		3	1/2 - 3/	0
94.84E-16.93NL13	Mammalia	Rodentia				rat/mouse	Distal	fused	Femur		1	1/2	0
94.84E-16.93NL13	Mammalia	Rodentia				rat/mouse		fused	vert, caudal		1	Comple	0
94.84E-16.93NL13	Mammalia	Rodentia				rat/mouse			Incisor		1	fragme	0
94.84E-16.93NL13	Mammalia	Rodentia				rat/mouse		fused	Mandible	Right	1	1/2 - 3/	0
94.84E-16.93NL13	Mollusca					freshwater shell			Shell		2	fragment	
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo		fused	Premaxilla	Right	1	Comple	14
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	Premaxilla	Left	1	Comple	13
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			L bovid		Fused	Petris Temporal		1	fragme	7

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL13		vert, thoracic	
94.84E-16.93NL13		Ulna	
94.84E-16.93NL13		Tibia	
94.84E-16.93NL13		long bone	
94.84E-16.93NL13		Metacarpal	
94.84E-16.93NL13		long bone	
94.84E-16.93NL13		rib/spine	
94.84E-16.93NL13	rat/mouse	Tibia	
94.84E-16.93NL13	rat/mouse	Radius	
94.84E-16.93NL13	rat/mouse	Femur	
94.84E-16.93NL13	box turtle	carapace	
94.84E-16.93NL13	box turtle	carapace	
94.84E-16.93NL13	box turtle	Carapace	
94.84E-16.93NL13	turtle	Ilium	
94.84E-16.93NL13	turtle	Tibia/Fibula	
94.84E-16.93NL13	fish	Quadrate	
94.84E-16.93NL13	fish	rib/spine	
94.84E-16.93NL13	fish	Hyomandibular	
94.84E-16.93NL13	turtle	Metapodial	
94.84E-16.93NL13	turtle	Humerus	
94.84E-16.93NL13		Vert	dev=fetal/newborn
94.84E-16.93NL13		Vert	dev=fetal/newborn
94.84E-16.93NL13		indeterminate	dev=fetal/newborn
94.84E-16.93NL13	snake	Vert	
94.84E-16.93NL13	sm/bird	long bone	
94.84E-16.93NL13	sm/bird	Skull	
94.84E-16.93NL13	rat/mouse	Basioccipital	
94.84E-16.93NL13	rat/mouse	Femur	
94.84E-16.93NL13	rat/mouse	vert, caudal	
94.84E-16.93NL13	rat/mouse	Incisor	
94.84E-16.93NL13	rat/mouse	Mandible	
94.84E-16.93NL13	freshwater she	Shell	
94.84E-16.93NL14	buffalo	Premaxilla	
94.84E-16.93NL14	zebu	Premaxilla	
94.84E-16.93NL14	L bovid	Petris Temporal	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			L bovid		Fused	Mandible	Right	1	fragme	26
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			L bovid		Fused	Mandible	Left	1	fragme	10
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			L bovid	Proxim	Indeterminate	Ulna	Left	1	<1/4	24
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			L bovid	Distal	Fused	Humerus	Left	1	<1/4	125
94.84E-16.93NL14	lm						Shaft	Indeterminate	Humerus	Right	2	<1/4	117
94.84E-16.93NL14	lm							Indeterminate	Scapula		1	<1/4	60
94.84E-16.93NL14	lm						Arch	Indeterminate	vert, cervical		1	1/4	17
94.84E-16.93NL14	lm						Epiphy	Unfused	vert, cervical		1	<1/4	4
94.84E-16.93NL14	lm						Epiphy	Unfused	vert, cervical		1	<1/4	4
94.84E-16.93NL14	lm						Arch	Indeterminate	vert, thoracic		1	1/4 - 1/	13
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			L bovid		Fused	vert, thoracic		1	1/2 - 3/	19
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			L bovid	Arch	fused	vert, thoracic		1	<1/4	8
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			L bovid	Arch	Indeterminate	vert, thoracic		1	<1/4	8
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			L bovid		Unfused	vert, lumbar		1	1/2 - 3/	58
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			L bovid	Arch	Indeterminate	vert, lumbar		1	1/4 - 1/	19
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae			bovid	Arch	Indeterminate	vert, lumbar		1	<1/4	2
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	1st Phalanx		1	Comple	48
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	Lateral Malleolus		1	Comple	19
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	tarsal 2/3		1	Comple	11
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Indeterminate	1st Phalanx		1	1/4 - 1/	7
94.84E-16.93NL14	Mammalia	Artiodactyla	Suidae	Sus		pig	Distal	fused	1st Phalanx		1	<1/4	1
94.84E-16.93NL14	lm							Indeterminate	indeterminate		109	fragme	157
94.84E-16.93NL14	lm							Indeterminate	long bone		56	fragme	211
94.84E-16.93NL14	lm							Indeterminate	Skull		18	fragme	37
94.84E-16.93NL14	lm							Indeterminate	rib/spine		85	fragme	124
94.84E-16.93NL14	lm							Unfused	Vert		3	1/4 - 1/	23
94.84E-16.93NL14	unident							Indeterminate	indeterminate			fragme	58
94.84E-16.93NL14	lm								Tooth		12	fragme	4
94.84E-16.93NL14	lm							Indeterminate	indeterminate		10	fragme	5
94.84E-16.93NL14	lm/mm							Indeterminate	indeterminate		10	fragme	13
94.84E-16.93NL14	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		Indeterminate	indeterminate		10	fragme	8
94.84E-16.93NL14	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Unfused	Humerus	Left	1	1/4 - 1/	16
94.84E-16.93NL14	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Fused	Scapula	Left	1	1/2 - 3/4	
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		Fused	Radius	Right	1	3/4+	41
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Proxim	Fused	Metacarpal	Right	1	<1/4	3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL14	L bovid	Mandible	
94.84E-16.93NL14	L bovid	Mandible	
94.84E-16.93NL14	L bovid	Ulna	
94.84E-16.93NL14	L bovid	Humerus	mineralized
94.84E-16.93NL14		Humerus	mineralized
94.84E-16.93NL14		Scapula	lots of muscle markings
94.84E-16.93NL14		vert, cervical	
94.84E-16.93NL14		vert, cervical	
94.84E-16.93NL14		vert, cervical	
94.84E-16.93NL14		vert, thoracic	
94.84E-16.93NL14	L bovid	vert, thoracic	
94.84E-16.93NL14	L bovid	vert, thoracic	
94.84E-16.93NL14	L bovid	vert, thoracic	
94.84E-16.93NL14	L bovid	vert, lumbar	
94.84E-16.93NL14	L bovid	vert, lumbar	
94.84E-16.93NL14	bovid	vert, lumbar	
94.84E-16.93NL14	zebu/buffalo	1st Phalanx	swollen and mineralized: Bd 27.6 Bp 31.2 GLpe 69.0
94.84E-16.93NL14	zebu/buffalo	Lateral Mallec	swollen and mineralized
94.84E-16.93NL14	zebu/buffalo	tarsal 2/3	swollen and mineralized
94.84E-16.93NL14	zebu/buffalo	1st Phalanx	
94.84E-16.93NL14	pig	1st Phalanx	
94.84E-16.93NL14		indeterminate	b=16
94.84E-16.93NL14		long bone	b=3, c=5
94.84E-16.93NL14		Skull	
94.84E-16.93NL14		rib/spine	b=2
94.84E-16.93NL14		Vert	
94.84E-16.93NL14		indeterminate	
94.84E-16.93NL14		Tooth	b=1
94.84E-16.93NL14		indeterminate	mineralized
94.84E-16.93NL14		indeterminate	big for sheep/goat/deer, small for Bos/Bubalus
94.84E-16.93NL14	sheep/goat/dee	indeterminate	
94.84E-16.93NL14	sheep/goat/dee	Humerus	
94.84E-16.93NL14	sheep/goat/dee	Scapula	dev=subadult
94.84E-16.93NL14	goat	Radius	
94.84E-16.93NL14	sheep/goat	Metacarpal	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Fused	Metacarpal		1	<1/4	7
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Unfused	Femur	Right	1	<1/4	6
94.84E-16.93NL14	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Indeterminate	Metacarpal		1	<1/4	1
94.84E-16.93NL14	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Unfused	Tibia		1	<1/4	1
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	Carpal/tarsal	Left	1	Comple	3
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		Fused	3rd Phalanx		1	3/4+	1
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	3rd Phalanx		2	Comple	2
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Arch	Indeterminate	vert, cervical		1	<1/4	3
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Arch	Indeterminate	vert, thoracic		1	1/4 - 1/	2
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Antilope		sheep/goat/b	Lower		Molar	Right	1	Comple	2
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Antilope		sheep/goat/blackbuck			Tooth		6	fragme	1
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Antilope		sheep/goat/b	Proxim	Fused	1st Phalanx		1	<1/4	1
94.84E-16.93NL14	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Antilope		sheep/goat/b	Distal	Indeterminate	1st Phalanx		1	<1/4	0
94.84E-16.93NL14	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		Fused	Axis		1	Comple	11
94.84E-16.93NL14	mm							Indeterminate	indeterminate		34	fragme	16
94.84E-16.93NL14	mm							Indeterminate	rib/spine		53	fragme	31
94.84E-16.93NL14	mm							Indeterminate	long bone		56	fragme	47
94.84E-16.93NL14	mm							Fused	Costal Cartilage		1	fragme	1
94.84E-16.93NL14	mm							Indeterminate	Skull		18	fragme	10
94.84E-16.93NL14	mm							Indeterminate	Vert		7	fragme	10
94.84E-16.93NL14	Reptilia	Squamata				snake		Fused	Vert		3	Comple	2
94.84E-16.93NL14	Reptilia	Testudines				turtle		Fused	Carapace		2	Comple	1
94.84E-16.93NL14	Reptilia	Testudines				turtle		Fused	Pelvic Girdle		2	1/2	2
94.84E-16.93NL14	Reptilia	Testudines				turtle		Fused	Skull		1	1/2	1
94.84E-16.93NL14	Reptilia	Testudines				turtle		Fused	Phalanx		1	Comple	0
94.84E-16.93NL14	Mammalia	Rodentia				S rodent		Fused	vert, cervical		1	Comple	0
94.84E-16.93NL14	Mammalia	Rodentia				S rodent		fused	vert, lumbar		1	3/4+	0
94.84E-16.93NL14	Mammalia	Rodentia				S rodent		Fused	Scapula		2	1/2 - 3/	0
94.84E-16.93NL14	Mammalia	Rodentia				S rodent		Fused	Innominate		1	1/2	0
94.84E-16.93NL14	Mammalia	Rodentia				S rodent	Proxim	Fused	Tibia		1	1/2 - 3/	0
94.84E-16.93NL14	Mammalia	Rodentia				S rodent		Fused	long bone		3	fragme	0
94.84E-16.93NL14	lm/mm						Distal	Unfused	Femur		1	<1/4	0
94.84E-16.93NL14	lm/mm							Indeterminate	Ilium	Right	1	Comple	1
94.84E-16.93NL14	lm/mm							fused	Petris Temporal		1	Comple	0
94.84E-16.93NL14	lm/mm							Indeterminate	Skull		2	fragme	3

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL14	sheep/goat	Metacarpal	saw=1, Bd 26.3, waste from metacarp tool
94.84E-16.93NL14	sheep/goat	Femur	dev=subadult
94.84E-16.93NL14	sheep/goat/de	Metacarpal	
94.84E-16.93NL14	sheep/goat/de	Tibia	dev=subadult
94.84E-16.93NL14	goat	Carpal/tarsal	
94.84E-16.93NL14	sheep/goat	3rd Phalanx	
94.84E-16.93NL14	goat	3rd Phalanx	
94.84E-16.93NL14	goat	vert, cervical	
94.84E-16.93NL14	goat	vert, thoracic	
94.84E-16.93NL14	sheep/goat/bla	Molar	
94.84E-16.93NL14	sheep/goat/bla	Tooth	
94.84E-16.93NL14	sheep/goat/bla	1st Phalanx	
94.84E-16.93NL14	sheep/goat/bla	1st Phalanx	
94.84E-16.93NL14	sheep/goat/de	Axis	
94.84E-16.93NL14		indeterminate	b=5
94.84E-16.93NL14		rib/spine	b=2
94.84E-16.93NL14		long bone	b=5, c=1
94.84E-16.93NL14		Costal Cartilage	
94.84E-16.93NL14		Skull	
94.84E-16.93NL14		Vert	
94.84E-16.93NL14	snake	Vert	
94.84E-16.93NL14	turtle	Carapace	
94.84E-16.93NL14	turtle	Pelvic Girdle	
94.84E-16.93NL14	turtle	Skull	
94.84E-16.93NL14	turtle	Phalanx	
94.84E-16.93NL14	S rodent	vert, cervical	
94.84E-16.93NL14	S rodent	vert, lumbar	
94.84E-16.93NL14	S rodent	Scapula	
94.84E-16.93NL14	S rodent	Innominate	
94.84E-16.93NL14	S rodent	Tibia	
94.84E-16.93NL14	S rodent	long bone	
94.84E-16.93NL14		Femur	dev=fetal/newborn
94.84E-16.93NL14		Ilium	dev=fetal/newborn
94.84E-16.93NL14		Petris Temporal	
94.84E-16.93NL14		Skull	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL14	lm/mm							Unfused	vert, thoracic		1	<1/4	0
94.84E-16.93NL14	sm/bird					sm/bird		Indeterminate	Skull		4	fragme	0
94.84E-16.93NL14	sm/bird					sm/bird	Distal	Indeterminate	Phalanx		1	fragme	0
94.84E-16.93NL14	sm							Indeterminate	long bone		5	fragme	1
94.84E-16.93NL14	sm							Indeterminate	rib/spine		11	fragme	2
94.84E-16.93NL14	lm							Indeterminate	Rib		1	fragme	0
94.84E-16.93NL14	lm							Indeterminate	Skull		2	fragme	3
94.84E-16.93NL14	Reptilia					reptile		Indeterminate	Skull		2	fragme	1
94.84E-16.93NL14	Reptilia	Testudines				turtle		Fused	Scapula		1	fragme	1
94.84E-16.93NL14	Reptilia	Squamata				snake		Fused	Vert		1	fragme	0
94.84E-16.93NL14	Osteichthyes	Siluriformes	Ictaluridae			Ritha		Fused	Premaxilla	Right	1	Comple	1
94.84E-16.93NL14	Aves/Reptilia					bird/reptile			Shell		0	fragme	0
94.84E-16.93NL14	Aves					bird		Indeterminate	long bone		12	fragme	1
94.84E-16.93NL14	Aves					bird			Eggshell			fragme	0
94.84E-16.93NL14	lm							Indeterminate	rib/spine		3	fragme	13
94.84E-16.93NL14	lm/mm							Indeterminate	Innominate		2	<1/4	7
94.84E-16.93NL14	lm/mm						blade	Indeterminate	scapula		2	<1/4	8
94.84E-16.93NL14	lm							Indeterminate	rib/spine		3	fragme	5
94.84E-16.93NL14	lm							Indeterminate	long bone		3	fragme	8
94.84E-16.93NL14	unident							Indeterminate	indeterminate			fragme	0
94.84E-16.93NL15	Aves					M bird		Indeterminate	long bone		10	fragme	3
94.84E-16.93NL15	Aves					bird			Eggshell			fragme	0
94.84E-16.93NL15	unident							Indeterminate	indeterminate			fragme	44
94.84E-16.93NL15	lm							Fused	Sesamoid		1	Comple	2
94.84E-16.93NL15	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	3rd Phalanx		1	Comple	14
94.84E-16.93NL15	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	1st Phalanx		1	3/4+	49
94.84E-16.93NL15	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	1st Phalanx		1	1/2	22
94.84E-16.93NL15	lm						Distal	Indeterminate	2nd Phalanx		1	<1/4	7
94.84E-16.93NL15	lm							Indeterminate	1st Phalanx		1	<1/4	5
94.84E-16.93NL15	lm						Proxim	Indeterminate	Tibia		1	<1/4	24
94.84E-16.93NL15	lm							Indeterminate	Skull		1	fragme	5
94.84E-16.93NL15	lm							Indeterminate	vert, lumbar		1	1/2	32
94.84E-16.93NL15	lm							Indeterminate	vert, thoracic		1	1/2	13
94.84E-16.93NL15	lm						Arch	Indeterminate	vert, thoracic		1	1/2	16
94.84E-16.93NL15	Mammalia								Tooth			fragme	10

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL14		vert, thoracic	
94.84E-16.93NL14	sm/bird	Skull	
94.84E-16.93NL14	sm/bird	Phalanx	
94.84E-16.93NL14		long bone	
94.84E-16.93NL14		rib/spine	
94.84E-16.93NL14		Rib	dev=fetal/newborn
94.84E-16.93NL14		Skull	
94.84E-16.93NL14	reptile	Skull	
94.84E-16.93NL14	turtle	Scapula	
94.84E-16.93NL14	snake	Vert	
94.84E-16.93NL14	Ritha	Premaxilla	
94.84E-16.93NL14	bird/reptile	Shell	
94.84E-16.93NL14	bird	long bone	
94.84E-16.93NL14	bird	Eggshell	
94.84E-16.93NL14		rib/spine	
94.84E-16.93NL14		Innominate	
94.84E-16.93NL14		scapula	
94.84E-16.93NL14		rib/spine	
94.84E-16.93NL14		long bone	b=1, c=1
94.84E-16.93NL14		indeterminate	
94.84E-16.93NL15	M bird	long bone	
94.84E-16.93NL15	bird	Eggshell	
94.84E-16.93NL15		indeterminate	
94.84E-16.93NL15		Sesamoid	
94.84E-16.93NL15	zebu/buffalo	3rd Phalanx	DLS 62.9 Ld 48.7 MBS 21.4
94.84E-16.93NL15	zebu/buffalo	1st Phalanx	severe muscle markings
94.84E-16.93NL15	zebu/buffalo	1st Phalanx	
94.84E-16.93NL15		2nd Phalanx	
94.84E-16.93NL15		1st Phalanx	severe muscle markings
94.84E-16.93NL15		Tibia	
94.84E-16.93NL15		Skull	
94.84E-16.93NL15		vert, lumbar	
94.84E-16.93NL15		vert, thoracic	cut=1
94.84E-16.93NL15		vert, thoracic	
94.84E-16.93NL15		Tooth	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL15	lm							Indeterminate	long bone		39	fragme	227
94.84E-16.93NL15	lm							Indeterminate	rib/spine		35	fragme	69
94.84E-16.93NL15	lm							Fused	Costal Cartilage		1	fragme	2
94.84E-16.93NL15	lm							Indeterminate	indeterminate		45	fragme	61
94.84E-16.93NL15	mm							Indeterminate	long bone		49	fragme	37
94.84E-16.93NL15	mm							Indeterminate	rib/spine		34	fragme	20
94.84E-16.93NL15	mm							Indeterminate	Skull		5	fragme	3
94.84E-16.93NL15	mm							Indeterminate	indeterminate		33	fragme	18
94.84E-16.93NL15	mm						Spine	Indeterminate	vert, lumbar		1	1/2	7
94.84E-16.93NL15	mm						Arch	Unfused	vert, cervical		1	Comple	7
94.84E-16.93NL15	mm						Proxim	Fused	Ulna		1	<1/4	4
94.84E-16.93NL15	mm							Indeterminate	Mandible		1	fragme	1
94.84E-16.93NL15	mm							Indeterminate	hyoid		2	fragme	1
94.84E-16.93NL15	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Fused	Scapula	Left	1	fragme	4
94.84E-16.93NL15	Mammalia	Artiodactyla	Suidae	Sus		pig			Tooth		1	fragme	1
94.84E-16.93NL15	Mammalia								Molar		1	fragme	0
94.84E-16.93NL15	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Lower		M3	Left	1	Comple	1
94.84E-16.93NL15	lm							Indeterminate	vert, cervical		1	1/2	3
94.84E-16.93NL15	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		Fused	Carpal/tarsal		2	Comple	2
94.84E-16.93NL15	mm							Indeterminate	vert, lumbar		1	<1/4	1
94.84E-16.93NL15	mm						Epiphy	Indeterminate	Vert		1	fragme	0
94.84E-16.93NL15	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Proxim	Unfused	2nd Phalanx		1	Comple	0
94.84E-16.93NL15	mm								Tooth root		2	<1/4	0
94.84E-16.93NL15	mm						Distal	Indeterminate	2nd Phalanx		1	1/4	0
94.84E-16.93NL15	Mammalia							Indeterminate	Vert		3	<1/4	1
94.84E-16.93NL15	Mammalia							Indeterminate	Rib		2	1/2	1
94.84E-16.93NL15	Mammalia						Proxim	Unfused	Ulna	Left	1	fragme	1
94.84E-16.93NL15	Mammalia							Indeterminate	Scapula		2	1/4	5
94.84E-16.93NL15	Mammalia							Indeterminate	long bone		2	fragme	0
94.84E-16.93NL15	sm							Indeterminate	Skull		4	fragme	1
94.84E-16.93NL15	sm							Indeterminate	Rib		2	fragme	0
94.84E-16.93NL15	sm							Indeterminate	long bone		5	fragme	2
94.84E-16.93NL15	sm							Indeterminate	Vert		2	fragme	0
94.84E-16.93NL15	Reptilia	Testudines				turtle		Indeterminate	Skull	Right	1	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL15		long bone	b=3, c=2
94.84E-16.93NL15		rib/spine	b=2, c=1
94.84E-16.93NL15		Costal Cartilage	
94.84E-16.93NL15		indeterminate	b=3
94.84E-16.93NL15		long bone	b=5
94.84E-16.93NL15		rib/spine	c=1
94.84E-16.93NL15		Skull	
94.84E-16.93NL15		indeterminate	b=2
94.84E-16.93NL15		vert, lumbar	
94.84E-16.93NL15		vert, cervical	
94.84E-16.93NL15		Ulna	
94.84E-16.93NL15		Mandible	
94.84E-16.93NL15		hyoid	
94.84E-16.93NL15	sheep/goat	Scapula	
94.84E-16.93NL15	pig	Tooth	
94.84E-16.93NL15		Molar	
94.84E-16.93NL15	sheep/goat/de	M3	
94.84E-16.93NL15		vert, cervical	dev=(young) subadult, b=1
94.84E-16.93NL15	sheep/goat	Carpal/tarsal	dev=subadult
94.84E-16.93NL15		vert, lumbar	
94.84E-16.93NL15		Vert	
94.84E-16.93NL15	sheep/goat	2nd Phalanx	
94.84E-16.93NL15		Tooth root	
94.84E-16.93NL15		2nd Phalanx	
94.84E-16.93NL15		Vert	dev=fetal/newborn
94.84E-16.93NL15		Rib	dev=fetal/newborn
94.84E-16.93NL15		Ulna	dev=subadult
94.84E-16.93NL15		Scapula	dev=fetal/newborn
94.84E-16.93NL15		long bone	dev=fetal/newborn
94.84E-16.93NL15		Skull	
94.84E-16.93NL15		Rib	
94.84E-16.93NL15		long bone	
94.84E-16.93NL15		Vert	
94.84E-16.93NL15	turtle	Skull	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL15	Reptilia	Testudines				turtle		Fused	Scapula		1	3/4+	0
94.84E-16.93NL15	Reptilia	Testudines				turtle		Fused	long bone		1	3/4+	0
94.84E-16.93NL15	Reptilia	Squamata				snake		Fused	Vert		1	Comple	1
94.84E-16.93NL15	Osteichthyes					fish		Fused	Parasphenoid		1	1/4	0
94.84E-16.93NL15	Osteichthyes					fish		Fused	Spine		1	Comple	0
94.84E-16.93NL15	Osteichthyes					fish		Indeterminate	indeterminate		4	fragme	0
94.84E-16.93NL15	Mammalia	Rodentia				rat/mouse		Fused	Tibia		1	3/4+	0
94.84E-16.93NL15	Mammalia	Rodentia				rat/mouse		Fused	Humerus		1	Comple	0
94.84E-16.93NL15	Mammalia	Rodentia				rat/mouse		Fused	Scapula		1	3/4+	0
94.84E-16.93NL15	Mammalia	Rodentia				rat/mouse			Incisor		2	1/2 - 3/	0
94.84E-16.93NL15	Mammalia	Rodentia				rat/mouse		Indeterminate	long bone		2	fragme	0
94.84E-16.93NL15	sm						Distal	Fused	Radius		1	fragme	0
94.84E-16.93NL15	unident							Indeterminate	indeterminate			fragme	0
94.84E-16.93NL15	Mollusca					shell			Shell		5	fragme	3
94.84E-16.93NL16	lm							Indeterminate	indeterminate		2	fragme	1
94.84E-16.93NL16	lm							Indeterminate	rib/spine		2	fragme	3
94.84E-16.93NL16	lm							Indeterminate	long bone		3	fragme	12
94.84E-16.93NL16	Mammalia							indeterminate	long bone		1	fragme	0
94.84E-16.93NL16	mm							Indeterminate	Skull		4	fragme	3
94.84E-16.93NL16	mm							Indeterminate	rib/spine		9	fragme	3
94.84E-16.93NL16	mm							Indeterminate	indeterminate		1	fragme	1
94.84E-16.93NL16	mm							Indeterminate	long bone		8	fragme	4
94.84E-16.93NL16	Mammalia	Rodentia				rat/mouse	Proxim	Prox.=Fused;	Femur	Right	1	Comple	0
94.84E-16.93NL16	Mammalia	Rodentia				rat/mouse		Prox.=Unfuse	Tibia	Right	1	Comple	0
94.84E-16.93NL16	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		Fused	Femur		1	<1/4	0
94.84E-16.93NL16	sm/bird					sm/bird		Indeterminate	long bone		8	fragme	3
94.84E-16.93NL16	sm/bird					sm/bird		Indeterminate	indeterminate		2	fragme	0
94.84E-16.93NL16	Osteichthyes					fish		Indeterminate	Spine Support		1	Comple	0
94.84E-16.93NL16	unident							Indeterminate	indeterminate			fragme	5
94.84E-16.93NL17	lm						Distal	Indeterminate	Phalanx 1 or 2		1	1/4	5
94.84E-16.93NL17	Aves					bird		Indeterminate	long bone		1	fragme	1
94.84E-16.93NL17	unident							Indeterminate	indeterminate			fragme	15
94.84E-16.93NL17	lm							Indeterminate	long bone		36	fragme	187
94.84E-16.93NL17	lm							Indeterminate	rib/spine		52	fragme	242
94.84E-16.93NL17	lm							Indeterminate	Skull		9	fragme	45

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL15	turtle	Scapula	
94.84E-16.93NL15	turtle	long bone	
94.84E-16.93NL15	snake	Vert	
94.84E-16.93NL15	fish	Parasphenoid	
94.84E-16.93NL15	fish	Spine	
94.84E-16.93NL15	fish	indeterminate	
94.84E-16.93NL15	rat/mouse	Tibia	
94.84E-16.93NL15	rat/mouse	Humerus	
94.84E-16.93NL15	rat/mouse	Scapula	
94.84E-16.93NL15	rat/mouse	Incisor	
94.84E-16.93NL15	rat/mouse	long bone	
94.84E-16.93NL15		Radius	
94.84E-16.93NL15		indeterminate	
94.84E-16.93NL15	shell	Shell	
94.84E-16.93NL16		indeterminate	
94.84E-16.93NL16		rib/spine	
94.84E-16.93NL16		long bone	
94.84E-16.83NL16		long bone	w=1, pol=1
94.84E-16.93NL16		Skull	
94.84E-16.93NL16		rib/spine	
94.84E-16.93NL16		indeterminate	b=1, c=1
94.84E-16.93NL16		long bone	b=1
94.84E-16.93NL16	rat/mouse	Femur	
94.84E-16.93NL16	rat/mouse	Tibia	
94.84E-16.93NL16	Indian Hare	Femur	
94.84E-16.93NL16	sm/bird	long bone	
94.84E-16.93NL16	sm/bird	indeterminate	
94.84E-16.93NL16	fish	Spine Suppor	10 - 20 cm Standard Length?
94.84E-16.93NL16		indeterminate	b=10
94.84E-16.93NL17		Phalanx 1 or 2	
94.84E-16.93NL17	bird	long bone	
94.84E-16.93NL17		indeterminate	b=3
94.84E-16.93NL17		long bone	b=1
94.84E-16.93NL17		rib/spine	weight is ~30% mineralized
94.84E-16.93NL17		Skull	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL17	lm							Indeterminate	indeterminate		49	fragme	105
94.84E-16.93NL17	mm							Erupting	Incisor		1	fragme	0
94.84E-16.93NL17	Mammalia								Tooth		29	fragme	19
94.84E-16.93NL17	mm							Indeterminate	rib/spine		22	fragme	27
94.84E-16.93NL17	mm							Indeterminate	long bone		18	fragme	24
94.84E-16.93NL17	mm							Indeterminate	Skull		8	fragme	7
94.84E-16.93NL17	mm							Indeterminate	indeterminate		30	fragme	18
94.84E-16.93NL17	mm							Fused	Costal Cartilage		3	fragme	3
94.84E-16.93NL17	mm							Indeterminate	Vert		8	fragme	11
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		Fused	Mandible	Left	1	fragme	22
94.84E-16.93NL17	Reptilia	Testudines				turtle		Fused	carapace		1	fragme	5
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Proxim	Fused	Ulna	Right	1	1/4	2
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Antilope	cervicapra	blackbuck		Fused	Mandible	Left	1	<1/4	3
94.84E-16.93NL17	Reptilia	Squamata				snake		Fused	Vert		6	Comple	13
94.84E-16.93NL17	Mammalia	Artiodactyla	Suidae	Sus		pig		Fused	Maxilla	Right	1	fragme	4
94.84E-16.93NL17	Reptilia	Testudines				turtle		Indeterminate	indeterminate		1	1/2 - 3/	1
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		Fused	Petris Temporal		2	fragme	3
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	2nd Phalanx		1	1/2	1
94.84E-16.93NL17	Reptilia	Testudines				turtle		Indeterminate	long bone		1	Comple	0
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Fused	Ulna	Right	1	1/4	2
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Arch	Fused	vert, lumbar		1	1/4 - 1/	2
94.84E-16.93NL17	mm							Indeterminate	Ulna		1	<1/4	1
94.84E-16.93NL17	mm							Indeterminate	Maxilla		1	<1/4	0
94.84E-16.93NL17	mm						Distal	Indeterminate	2nd Phalanx		1	<1/4	0
94.84E-16.93NL17	Reptilia	Testudines				turtle		Fused	Ischium		1	Comple	1
94.84E-16.93NL17	Mammalia	Rodentia				rat/mouse		Fused	Mandible		1	fragme	0
94.84E-16.93NL17	Osteichthyes					fish		Fused	Spine		1	Comple	0
94.84E-16.93NL17	sm							Indeterminate	Rib		1	fragme	0
94.84E-16.93NL17	unident							Indeterminate	indeterminate			fragme	1
94.84E-16.93NL17	Mammalia							Indeterminate	Skull		1	fragme	0
94.84E-16.93NL17	Mammalia	Artiodactyla						Fused	metapodial		1	fragme	0
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Fused	Metatarsal		1	1/2	128
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Fused	Metacarpal		1	1/4	29
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	2nd Phalanx		1	Comple	24
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		Fused	Frontal	Right	1	fragme	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL17		indeterminate	b=1, pc=6
94.84E-16.93NL17		Incisor	
94.84E-16.93NL17		Tooth	
94.84E-16.93NL17		rib/spine	c=1
94.84E-16.93NL17		long bone	b=1, c=1
94.84E-16.93NL17		Skull	
94.84E-16.93NL17		indeterminate	c=2
94.84E-16.93NL17		Costal Cartilage	
94.84E-16.93NL17		Vert	b=1
94.84E-16.93NL17	goat	Mandible	M1 erupting, dP4 open roots, P3 open roots, P2 missing. Length of PM row: 33.1 mm
94.84E-16.93NL17	turtle	carapace	
94.84E-16.93NL17	sheep/goat	Ulna	dev=subadult, cut=1
94.84E-16.93NL17	blackbuck	Mandible	
94.84E-16.93NL17	snake	Vert	one is mineralized ~20% extra weight
94.84E-16.93NL17	pig	Maxilla	P4 in place
94.84E-16.93NL17	turtle	indeterminate	
94.84E-16.93NL17	sheep/goat	Petris Temporal	
94.84E-16.93NL17	goat	2nd Phalanx	Bd 8.5
94.84E-16.93NL17	turtle	long bone	
94.84E-16.93NL17	sheep/goat	Ulna	
94.84E-16.93NL17	sheep/goat	vert, lumbar	
94.84E-16.93NL17		Ulna	
94.84E-16.93NL17		Maxilla	
94.84E-16.93NL17		2nd Phalanx	
94.84E-16.93NL17	turtle	Ischium	
94.84E-16.93NL17	rat/mouse	Mandible	
94.84E-16.93NL17	fish	Spine	
94.84E-16.93NL17		Rib	
94.84E-16.93NL17		indeterminate	
94.84E-16.93NL17		Skull	dev=fetal/newborn
94.84E-16.93NL17		metapodial	dev=fetal/newborn
94.84E-16.93NL17	zebu/buffalo	Metatarsal	mineralized ~ 50% extra weight
94.84E-16.93NL17	zebu/buffalo	Metacarpal	
94.84E-16.93NL17	zebu/buffalo	2nd Phalanx	Bp 28.8 Bd 26.0 GL 43.8
94.84E-16.93NL17	goat	Frontal	dev=subadult, with budding horn

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL17	lm							Fused	Costal Cartilage		2	fragme	5
94.84E-16.93NL17	lm							Indeterminate	3rd Phalanx		3	1/4 - 1/	6
94.84E-16.93NL17	lm							Unfused Ante	vert, cervical		1	fragme	6
94.84E-16.93NL17	lm							Fused	vert, lumbar		1	1/2	7
94.84E-16.93NL17	lm						Arch	Indeterminate	vert, cervical		1	1/2	5
94.84E-16.93NL17	lm							Indeterminate	Axis		1	<1/4	4
94.84E-16.93NL17	lm							Indeterminate	Mandible w/ I	Left	1	fragme	29
94.84E-16.93NL17	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Lower		Molar		1	fragme	10
94.84E-16.93NL17	mm						Proxim	Unfused	Humerus		1	fragme	5
94.84E-16.93NL17	lm							Unfused	vert, lumbar		1	1/2 - 3/	24
94.84E-16.93NL17	lm						Arch	Indeterminate	vert, thoracic		1	<1/4	1
94.84E-16.93NL17	lm						Proxim	Unfused	Radius		1	fragme	18
94.84E-16.93NL17	lm							Indeterminate	long bone		3	fragme	9
94.84E-16.93NL17	lm						Arch	Indeterminate	Vert		1	fragme	4
94.84E-16.93NL17	lm							Indeterminate	rib/spine		1	fragme	3
94.84E-16.93NL17	lm							Indeterminate	long bone		2	fragme	6
94.84E-16.93NL18	unident							Indeterminate	indeterminate			fragme	13
94.84E-16.93NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	Mandible	Right	1	fragme	13
94.84E-16.93NL18	lm							Indeterminate	long bone		1	<1/4	9
94.84E-16.93NL18	lm							Indeterminate	Lateral Malle	Right	1	Comple	8
94.84E-16.93NL18	lm						Distal	Indeterminate	1st Phalanx		1	1/4	8
94.84E-16.93NL18	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Unfused	1st Phalanx		1	3/4+	3
94.84E-16.93NL18	lm							Indeterminate	Skull		1	fragme	5
94.84E-16.93NL18	lm							Indeterminate	indeterminate		23	fragme	28
94.84E-16.93NL18	lm							Indeterminate	rib/spine		15	fragme	116
94.84E-16.93NL18	lm							Indeterminate	long bone		18	fragme	172
94.84E-16.93NL18	lm							Indeterminate	Mandible		3	fragme	12
94.84E-16.93NL18	lm								Tooth		4	fragme	2
94.84E-16.93NL18	lm							Fused	vert, caudal		1	<1/4	1
94.84E-16.93NL18	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Unfused	Scapula	Left	1	1/2 - 3/	2
94.84E-16.93NL18	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Shaft	Indeterminate	Humerus	Right	1	<1/4	6
94.84E-16.93NL18	mm							Indeterminate	long bone		7	fragme	7
94.84E-16.93NL18	mm							Indeterminate	rib/spine		7	fragme	7
94.84E-16.93NL18	mm							Indeterminate	Skull		2	fragme	1
94.84E-16.93NL18	sm							Indeterminate	long bone		4	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL17		Costal Cartilage	
94.84E-16.93NL17		3rd Phalanx	
94.84E-16.93NL17		vert, cervical	
94.84E-16.93NL17		vert, lumbar	
94.84E-16.93NL17		vert, cervical	pc=1
94.84E-16.93NL17		Axis	
94.84E-16.93NL17		Mandible w/ Pm or Molar	
94.84E-16.93NL17	zebu	Molar	
94.84E-16.93NL17		Humerus	
94.84E-16.93NL17		vert, lumbar	mineralized
94.84E-16.93NL17		vert, thoracic	
94.84E-16.93NL17		Radius	cut=1
94.84E-16.93NL17		long bone	b=3
94.84E-16.93NL17		Vert	b=1
94.84E-16.93NL17		rib/spine	
94.84E-16.93NL17		long bone	b=2
94.84E-16.93NL18		indeterminate	b=18, c=2
94.84E-16.93NL18	zebu/buffalo	Mandible	
94.84E-16.93NL18		long bone	
94.84E-16.93NL18		Lateral Malleolus	
94.84E-16.93NL18		1st Phalanx	
94.84E-16.93NL18	zebu/buffalo	1st Phalanx	dev=fetal/newborn
94.84E-16.93NL18		Skull	
94.84E-16.93NL18		indeterminate	b=10
94.84E-16.93NL18		rib/spine	b=2, c=1, 40% mineralization
94.84E-16.93NL18		long bone	b=9, 40% mineralization
94.84E-16.93NL18		Mandible	b=3
94.84E-16.93NL18		Tooth	b=4
94.84E-16.93NL18		vert, caudal	
94.84E-16.93NL18	sheep/goat/de	Scapula	dev=fetal/newborn
94.84E-16.93NL18	sheep/goat/de	Humerus	
94.84E-16.93NL18		long bone	b=2
94.84E-16.93NL18		rib/spine	c=2
94.84E-16.93NL18		Skull	
94.84E-16.93NL18		long bone	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL18	mm							Indeterminate	indeterminate		1	fragme	2
94.84E-16.93NL18	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	1st Phalanx		1	3/4+	3
94.84E-16.93NL18	Aves	Galliformes	Phasianidae	Pavo	cristatus	Indian Peafo	Proxim	Fused	Fibula	Left	1	1/4 - 1/	0
94.84E-16.93NL19	Aves	Falconiformes				bird of prey	Proxim	Fused	Femur		1	1/2	0
94.84E-16.93NL19	Aves					bird		Indeterminate	long bone		6	fragme	1
94.84E-16.93NL19	unident							Indeterminate	indeterminate			fragme	7
94.84E-16.93NL19	lm							Indeterminate	long bone		11	fragme	36
94.84E-16.93NL19	lm							Indeterminate	rib/spine		13	fragme	28
94.84E-16.93NL19	lm								Tooth		9	fragme	4
94.84E-16.93NL19	lm							Indeterminate	indeterminate		29	fragme	73
94.84E-16.93NL19	mm							Indeterminate	long bone		20	fragme	14
94.84E-16.93NL19	mm							Indeterminate	rib/spine		18	fragme	9
94.84E-16.93NL19	mm							Indeterminate	indeterminate		16	fragme	12
94.84E-16.93NL19	mm							Indeterminate	Skull		5	fragme	2
94.84E-16.93NL19	lm							Indeterminate	Mandible		1	<1/4	3
94.84E-16.93NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Fused	Metatarsal	Right	1	1/4	99
94.84E-16.93NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	Hyoid		1	1/2 - 3/	3
94.84E-16.93NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Arch	Fused	vert, thoracic		1	1/2 - 3/	19
94.84E-16.93NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	vert, cervical		1	1/4	14
94.84E-16.93NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Fused	Metacarpal		1	1/2	13
94.84E-16.93NL19	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Fused	Femur		1	<1/4	8
94.84E-16.93NL19	lm							Indeterminate	Vert		1	fragme	13
94.84E-16.93NL19	lm							Indeterminate	Mandible		2	fragme	10
94.84E-16.93NL19	mm							Indeterminate	Vert		2	fragme	7
94.84E-16.93NL19	lm						Proxim	Indeterminate	Scapula	Left	1	fragme	20
94.84E-16.93NL19	lm							Indeterminate	Skull		1	fragme	12
94.84E-16.93NL19	Mammalia	Artiodactyla	Bovidae	Antilope	cervicapra	blackbuck	Proxim	Unfused	Femur		1	1/4	2
94.84E-16.93NL19	mm						Shaft	Unfused	Femur	Right	1	fragme	5
94.84E-16.93NL19	Mammalia	Artiodactyla	Cervidae	Axis	axis	Chital		Fused	Basioccipital		1	1/2	2
94.84E-16.93NL19	Mammalia							Indeterminate	indeterminate		1	fragme	0
94.84E-16.93NL19	Mammalia							Indeterminate	long bone		1	fragme	5
94.84E-16.93NL19	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		Fused	Petris Temporal		1	fragme	3
94.84E-16.93NL19	mm							Indeterminate	Hyoid		1	1/4	0
94.84E-16.93NL19	Reptilia	Squamata				snake		Fused	Vert		4	1/2 - 3/	2
94.84E-16.93NL19	Mammalia	Rodentia				rat/mouse		Fused	Femur		1	Comple	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL18		indeterminate	
94.84E-16.93NL18	goat	1st Phalanx	
94.84E-16.93NL18	Indian Peafowl	Fibula	
94.84E-16.93NL19	bird of prey	Femur	
94.84E-16.93NL19	bird	long bone	b=5, cut=1
94.84E-16.93NL19		indeterminate	b=22, c=1
94.84E-16.93NL19		long bone	b=5, c=1
94.84E-16.93NL19		rib/spine	b=7
94.84E-16.93NL19		Tooth	b=9
94.84E-16.93NL19		indeterminate	b=8
94.84E-16.93NL19		long bone	b=6, c=2
94.84E-16.93NL19		rib/spine	b=4, cut=2, both cut marked frags are also burned
94.84E-16.93NL19		indeterminate	b=9
94.84E-16.93NL19		Skull	
94.84E-16.93NL19		Mandible	
94.84E-16.93NL19	zebu/buffalo	Metatarsal	
94.84E-16.93NL19	zebu/buffalo	Hyoid	cut=1
94.84E-16.93NL19	zebu/buffalo	vert, thoracic	
94.84E-16.93NL19	zebu/buffalo	vert, cervical	cut=1
94.84E-16.93NL19	zebu/buffalo	Metacarpal	b=1
94.84E-16.93NL19	zebu/buffalo	Femur	pc=1
94.84E-16.93NL19		Vert	b=1
94.84E-16.93NL19		Mandible	b=2
94.84E-16.93NL19		Vert	b=1, c=1
94.84E-16.93NL19		Scapula	
94.84E-16.93NL19		Skull	pc=1
94.84E-16.93NL19	blackbuck	Femur	b=1
94.84E-16.93NL19		Femur	
94.84E-16.93NL19	Chital	Basioccipital	c=1
94.84E-16.93NL19		indeterminate	dev=fetal/newborn
94.84E-16.93NL19		long bone	dev=fetal/newborn
94.84E-16.93NL19	sheep/goat/de	Petris Temporal	
94.84E-16.93NL19		Hyoid	
94.84E-16.93NL19	snake	Vert	b=4
94.84E-16.93NL19	rat/mouse	Femur	b=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL19	Mammalia							Indeterminate	long bone		1	1/2	1
94.84E-16.93NL19	sm							Indeterminate	long bone		6	fragme	1
94.84E-16.93NL19	lm							Indeterminate	long bone		4	fragme	20
94.84E-16.93NL19	mm							Indeterminate	rib/spine		1	fragme	0
94.84E-16.93NL19	lm/mm							Indeterminate	indeterminate		4	fragme	0
94.84E-16.93NL2	lm							Fused	vert, caudal		1	Comple	5
94.84E-16.93NL2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	2nd Phalanx		1	Comple	13
94.84E-16.93NL2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Fused	Metacarpal		1	1/4	51
94.84E-16.93NL2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Epiphy	Unfused	Metapodial		1	Comple	6
94.84E-16.93NL2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Fused	2nd Phalanx		1	1/4	4
94.84E-16.93NL2	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	intermediate (	Right	1	1/2	9
94.84E-16.93NL2	lm							Fused	Sesamoid		2	Comple	4
94.84E-16.93NL2	lm							Unfused	Tibia	Right	1	fragme	10
94.84E-16.93NL2	lm						Shaft	Indeterminate	Tibia		1	1/4 - 1/	86
94.84E-16.93NL2	lm						Shaft	Indeterminate	Tibia		1	1/4	42
94.84E-16.93NL2	lm						Lumba	Indeterminate	vert, lumbar		1	1/4 - 1/	24
94.84E-16.93NL2	lm						Spine	Indeterminate	Vert		2	fragme	11
94.84E-16.93NL2	lm						Distal	Indeterminate	Phalanx		1	1/4	4
94.84E-16.93NL2	unident							Indeterminate	indeterminate			fragme	19
94.84E-16.93NL2	lm							Indeterminate	long bone		94	fragme	215
94.84E-16.93NL2	lm							Indeterminate	rib/spine		24	fragme	71
94.84E-16.93NL2	lm							Indeterminate	Skull		11	fragme	54
94.84E-16.93NL2	lm							Indeterminate	indeterminate		37	fragme	90
94.84E-16.93NL2	mm							Indeterminate	long bone		24	fragme	14
94.84E-16.93NL2	mm							Indeterminate	rib/spine		27	fragme	14
94.84E-16.93NL2	Mammalia							Unfused	indeterminate		3	fragme	2
94.84E-16.93NL2	mm							Indeterminate	indeterminate		389	fragme	148
94.84E-16.93NL2	sm/bird					sm/bird		Indeterminate	long bone		4	fragme	1
94.84E-16.93NL2	Mammalia								Tooth		10	fragme	17
94.84E-16.93NL2	lm							Indeterminate	long bone		1	fragme	3
94.84E-16.93NL2	lm							Indeterminate	indeterminate		1	fragme	3
94.84E-16.93NL2	mm							Indeterminate	long bone		2	fragme	3
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	3rd Phalanx		1	Comple	10
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Indeterminate	Femur	Left	1	<1/4	44
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Fused	Tibia	Left	1	<1/4	22

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL19		long bone	b=1
94.84E-16.93NL19		long bone	c=1
94.84E-16.93NL19		long bone	b=4
94.84E-16.93NL19		rib/spine	b=1
94.84E-16.93NL19		indeterminate	b=2
94.84E-16.93NL2		vert, caudal	
94.84E-16.93NL2	zebu/buffalo	2nd Phalanx	Bp 26.3 Bd 23.8 GL 36.5
94.84E-16.93NL2	zebu/buffalo	Metacarpal	
94.84E-16.93NL2	zebu/buffalo	Metapodial	
94.84E-16.93NL2	zebu/buffalo	2nd Phalanx	
94.84E-16.93NL2	zebu/buffalo	intermediate carpal	
94.84E-16.93NL2		Sesamoid	
94.84E-16.93NL2		Tibia	
94.84E-16.93NL2		Tibia	
94.84E-16.93NL2		Tibia	
94.84E-16.93NL2		vert, lumbar	
94.84E-16.93NL2		Vert	
94.84E-16.93NL2		Phalanx	P1 or P2
94.84E-16.93NL2		indeterminate	
94.84E-16.93NL2		long bone	b=7
94.84E-16.93NL2		rib/spine	b=1, c=3
94.84E-16.93NL2		Skull	
94.84E-16.93NL2		indeterminate	b=1
94.84E-16.93NL2		long bone	b=2
94.84E-16.93NL2		rib/spine	b=3
94.84E-16.93NL2		indeterminate	dev=fetal/newborn
94.84E-16.93NL2		indeterminate	b=8, c=3
94.84E-16.93NL2	sm/bird	long bone	
94.84E-16.93NL2		Tooth	
94.84E-16.93NL2		long bone	b=1
94.84E-16.93NL2		indeterminate	
94.84E-16.93NL2		long bone	
94.84E-16.93NL20	zebu/buffalo	3rd Phalanx	DLS 56.2 Ld45.6 MBs16.1
94.84E-16.93NL20	zebu/buffalo	Femur	b=1
94.84E-16.93NL20	zebu/buffalo	Tibia	pc=1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Blade	Fused	Scapula	Left	1	<1/4	11
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Arch	Indeterminate	vert, lumbar		1	<1/4	23
94.84E-16.93NL20	lm							Indeterminate	indeterminate		12	fragme	45
94.84E-16.93NL20	lm							Indeterminate	long bone		16	fragme	59
94.84E-16.93NL20	lm							Indeterminate	rib/spine		13	fragme	45
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	Sesamoid		2	Comple	2
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		Fused	1st Phalanx		1	Comple	3
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Arch	Indeterminate	vert, thoracic		2	1/4 - 1/	4
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Shaft	Fused	Femur	Left	1	<1/4	2
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	Scapula	Right	1	1/4 - 1/	2
94.84E-16.93NL20	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Shaft	Fused	Radius	Left	1	<1/4	4
94.84E-16.93NL20	mm								Tooth		1	fragme	0
94.84E-16.93NL20	mm							Indeterminate	Skull		2	fragme	2
94.84E-16.93NL20	mm							Indeterminate	rib/spine		23	fragme	14
94.84E-16.93NL20	mm							Indeterminate	long bone		9	fragme	7
94.84E-16.93NL20	mm							Indeterminate	indeterminate		8	fragme	4
94.84E-16.93NL20	mm							Indeterminate	Vert		2	fragme	2
94.84E-16.93NL20	Mammalia	Carnivora	Herpestidae	Herpestes	edwardsii	mongoose	Distal	Indeterminate	Femur		1	<1/4	1
94.84E-16.93NL20	Mammalia	Carnivora	Herpestidae	Herpestes	edwardsii	mongoose		Indeterminate	long bone		2	fragme	2
94.84E-16.93NL20	sm							Indeterminate	long bone		1	fragme	0
94.84E-16.93NL20	unident							Indeterminate	indeterminate			fragme	4
94.84E-16.93NL20	Aves					L bird		Indeterminate	indeterminate		2	fragme	1
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	Patella	Left	1	Comple	36
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	Molar	Right	1	Comple	20
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Upper	Fused	Molar		1	fragme	9
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Indeterminate	2nd Phalanx		2	1/4 - 1/	9
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Unfused	2nd Phalanx		1	<1/4	1
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	Pubis	Right	1	fragme	18
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Fused	Calcaneus		1	<1/4	10
94.84E-16.93NL3	Mammalia	Chiroptera				bat	Distal	Fused	Humerus		1	1/2 - 3/	0
94.84E-16.93NL3	lm							Fused	Costal Cartilage		1	fragme	2
94.84E-16.93NL3	lm							Indeterminate	rib/spine		23	fragme	55
94.84E-16.93NL3	lm							Indeterminate	indeterminate		36	fragme	57
94.84E-16.93NL3	lm							Indeterminate	Skull		4	fragme	15
94.84E-16.93NL3	lm							Indeterminate	long bone		22	fragme	59

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL20	zebu/buffalo	Scapula	
94.84E-16.93NL20	zebu/buffalo	vert, lumbar	b=1
94.84E-16.93NL20		indeterminate	b=1, pc=10
94.84E-16.93NL20		long bone	b=8, c=5, 3 pieces are 20% mineralized
94.84E-16.93NL20		rib/spine	b=9, pc=1
94.84E-16.93NL20	zebu	Sesamoid	pc=1
94.84E-16.93NL20	goat	1st Phalanx	rg=1, Bp 11.2 Bd 10.8 GLpe 42.2
94.84E-16.93NL20	goat	vert, thoracic	
94.84E-16.93NL20	goat	Femur	
94.84E-16.93NL20	goat	Scapula	b=1
94.84E-16.93NL20	goat	Radius	pc=1
94.84E-16.93NL20		Tooth	
94.84E-16.93NL20		Skull	
94.84E-16.93NL20		rib/spine	b=12, c=3
94.84E-16.93NL20		long bone	b=6
94.84E-16.93NL20		indeterminate	b=4
94.84E-16.93NL20		Vert	b=2
94.84E-16.93NL20	mongoose	Femur	
94.84E-16.93NL20	mongoose	long bone	b=1, c=1
94.84E-16.93NL20		long bone	b=1
94.84E-16.93NL20		indeterminate	b=20
94.84E-16.93NL20	L bird	indeterminate	b=1
94.84E-16.93NL3	zebu/buffalo	Patella	
94.84E-16.93NL3	zebu/buffalo	Molar	dev=subadult, M1 or M2, roots open and light wear
94.84E-16.93NL3	zebu/buffalo	Molar	dev=old adult, very worn
94.84E-16.93NL3	zebu/buffalo	2nd Phalanx	
94.84E-16.93NL3	zebu/buffalo	2nd Phalanx	
94.84E-16.93NL3	zebu/buffalo	Pubis	
94.84E-16.93NL3	zebu/buffalo	Calcaneus	
94.84E-16.93NL3	bat	Humerus	
94.84E-16.93NL3		Costal Cartilage	
94.84E-16.93NL3		rib/spine	
94.84E-16.93NL3		indeterminate	
94.84E-16.93NL3		Skull	
94.84E-16.93NL3		long bone	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL3	lm								Tooth		2	fragme	1
94.84E-16.93NL3	lm							Indeterminate	Mandible		2	fragme	3
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		Sheep/goat			Molar	Upper	1	Comple	2
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Fused	Tibia	Left	1	<1/4	4
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	Metapodial		1	<1/4	3
94.84E-16.93NL3	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Unfused	Metapodial		1	<1/4	1
94.84E-16.93NL3	Mammalia	Artiodactyla				antelope/deer		Fused	3rd Phalanx		1	Comple	3
94.84E-16.93NL3	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Fused	1st Phalanx		1	fragme	0
94.84E-16.93NL3	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Fused	1st Phalanx		1	fragme	1
94.84E-16.93NL3	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Arch	Fused	vert, thoracic		1	<1/4	1
94.84E-16.93NL3	mm							Indeterminate	Skull		4	fragme	3
94.84E-16.93NL3	mm							Indeterminate	Mandible		3	fragme	5
94.84E-16.93NL3	mm							Indeterminate	long bone		22	fragme	19
94.84E-16.93NL3	mm							Indeterminate	indeterminate		15	fragme	12
94.84E-16.93NL3	mm							Indeterminate	rib/spine		34	fragme	18
94.84E-16.93NL3	Reptilia	Squamata				snake		Fused	Vert		1	Comple	2
94.84E-16.93NL3	Mammalia	Rodentia				rat/mouse	Proxim	Fused	Femur	Right	1	3/4+	0
94.84E-16.93NL3	sm							Indeterminate	vert, caudal		1	1/2 - 3/	0
94.84E-16.93NL3	sm							Indeterminate	long bone		8	fragme	2
94.84E-16.93NL3	sm/bird					sm/bird		Indeterminate	Skull		1	fragme	0
94.84E-16.93NL3	unident							Indeterminate	indeterminate			fragme	38
94.84E-16.93NL3	Aves					bird			Eggshell			fragme	1
94.84E-16.93NL3	Aves					bird		Indeterminate	long bone		7	fragme	2
94.84E-16.93NL4	lm							Fused	Costal Cartilage		6	fragme	15
94.84E-16.93NL4	lm							Indeterminate	rib/spine		39	fragme	120
94.84E-16.93NL4	lm							Indeterminate	indeterminate		31	fragme	47
94.84E-16.93NL4	lm							Indeterminate	long bone		48	fragme	146
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Arch	Fused	vert, thoracic		1	1/4 - 1/	35
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Distal	Indeterminate	Calcaneus		1	<1/4	12
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Indeterminate	Ulna	Right	1	<1/4	13
94.84E-16.93NL4	Mammalia						Proxim	Indeterminate	Metapodial		1	fragme	12
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Shaft	Fused	Ilium	Left	1	1/4 - 1/	36
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	carpal 2/3	Right	1	Comple	5
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	intermediate (	Right	1	Comple	10
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	Carpal		1	<1/4	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL3		Tooth	b=2
94.84E-16.93NL3		Mandible	
94.84E-16.93NL3	Sheep/goat	Molar	dev=adult, moderate wear
94.84E-16.93NL3	sheep/goat	Tibia	
94.84E-16.93NL3	goat	Metapodial	
94.84E-16.93NL3	goat	Metapodial	
94.84E-16.93NL3	antelope/deer	3rd Phalanx	DLS broken Ld broken MBS 11.9
94.84E-16.93NL3	sheep/goat/de	1st Phalanx	
94.84E-16.93NL3	sheep/goat/de	1st Phalanx	c=1
94.84E-16.93NL3	sheep/goat/de	vert, thoracic	
94.84E-16.93NL3		Skull	
94.84E-16.93NL3		Mandible	
94.84E-16.93NL3		long bone	b=1
94.84E-16.93NL3		indeterminate	
94.84E-16.93NL3		rib/spine	
94.84E-16.93NL3	snake	Vert	
94.84E-16.93NL3	rat/mouse	Femur	
94.84E-16.93NL3		vert, caudal	b=1
94.84E-16.93NL3		long bone	b=2, c=2
94.84E-16.93NL3	sm/bird	Skull	
94.84E-16.93NL3		indeterminate	b=56
94.84E-16.93NL3	bird	Eggshell	
94.84E-16.93NL3	bird	long bone	b=2
94.84E-16.93NL4		Costal Cartilage	
94.84E-16.93NL4		rib/spine	
94.84E-16.93NL4		indeterminate	
94.84E-16.93NL4		long bone	b=2
94.84E-16.93NL4	zebu/buffalo	vert, thoracic	
94.84E-16.93NL4	zebu/buffalo	Calcaneus	
94.84E-16.93NL4	zebu/buffalo	Ulna	
94.84E-16.93NL4		Metapodial	covered in caco3, and treated with HCl, which may have dissolved bone surface. might be young animal.
94.84E-16.93NL4	zebu/buffalo	Ilium	cut=1, cg=1, mineralized
94.84E-16.93NL4	zebu/buffalo	carpal 2/3	mineralized
94.84E-16.93NL4	zebu/buffalo	intermediate	mineralized
94.84E-16.93NL4	zebu/buffalo	Carpal	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		Fused	Sesamoid		1	Comple	1
94.84E-16.93NL4	lm						Proxim	Indeterminate	Humerus		1	<1/4	6
94.84E-16.93NL4	lm						Arch	Indeterminate	Vert		3	fragme	11
94.84E-16.93NL4	lm							Indeterminate	Skull		12	fragme	30
94.84E-16.93NL4	lm								Premolar	Right	1	Comple	5
94.84E-16.93NL4	lm							Indeterminate	Mandible		1	fragme	7
94.84E-16.93NL4	lm								Molar		1	fragme	1
94.84E-16.93NL4	lm								Incisor		2	fragme	3
94.84E-16.93NL4	lm								Tooth		5	fragme	3
94.84E-16.93NL4	lm							Unerupted	Molar		1	Comple	2
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			Molar		1	fragme	1
94.84E-16.93NL4	mm					S bovid?	Arch	Indeterminate	vert, thoracic		1	fragme	6
94.84E-16.93NL4	Mammalia	Artiodactyla	Cervidae			deer sp.			Antler		1	fragme	1
94.84E-16.93NL4	mm							Indeterminate	long bone		70	fragme	74
94.84E-16.93NL4	mm							Indeterminate	rib/spine		38	fragme	25
94.84E-16.93NL4	mm							Indeterminate	indeterminate		48	fragme	41
94.84E-16.93NL4	mm							Fused	Costal Cartilage		1	fragme	2
94.84E-16.93NL4	mm						Arch	Indeterminate	Vert		4	<1/4	6
94.84E-16.93NL4	mm						Arch	Indeterminate	vert, cervical		3	<1/4	8
94.84E-16.93NL4	mm						Arch	Indeterminate	vert, lumbar		2	<1/4	3
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Indeterminate	Ilium	Right	1	1/4 - 1/	3
94.84E-16.93NL4	lm						Proxim	Indeterminate	3rd Phalanx		1	<1/4	4
94.84E-16.93NL4	lm							Indeterminate	Mandible		1	fragme	4
94.84E-16.93NL4	mm							Indeterminate	Mandible	Right	1	fragme	4
94.84E-16.93NL4	mm						Proxim	Unfused	Humerus		1	<1/4	1
94.84E-16.93NL4	mm							Fused	Petris Temporal		1	fragme	0
94.84E-16.93NL4	mm								Incisor		1	fragme	0
94.84E-16.93NL4	mm							Indeterminate	Mandible		4	fragme	3
94.84E-16.93NL4	mm							Indeterminate	Mandible	Right	1	fragme	0
94.84E-16.93NL4	mm							Indeterminate	Mandible		1	fragme	1
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			P4	Right	1	Comple	1
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat			Molar		1	fragme	2
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Shaft	Fused	Metapodial		2	fragme	6
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Proxim	Fused	Metapodial		1	<1/4	2
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		Fused	central tarsal		1	1/4 - 1/	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL4	zebu/buffalo	Sesamoid	
94.84E-16.93NL4		Humerus	
94.84E-16.93NL4		Vert	
94.84E-16.93NL4		Skull	
94.84E-16.93NL4		Premolar	dev=adult, moderate wear
94.84E-16.93NL4		Mandible	
94.84E-16.93NL4		Molar	dev=old adult, very worn
94.84E-16.93NL4		Incisor	dev=old adult, very worn
94.84E-16.93NL4		Tooth	
94.84E-16.93NL4		Molar	dev=subadult
94.84E-16.93NL4	sheep/goat	Molar	2nd or 3rd molar
94.84E-16.93NL4	S bovid?	vert, thoracic	
94.84E-16.93NL4	deer sp.	Antler	w=1
94.84E-16.93NL4		long bone	
94.84E-16.93NL4		rib/spine	
94.84E-16.93NL4		indeterminate	
94.84E-16.93NL4		Costal Cartilage	
94.84E-16.93NL4		Vert	
94.84E-16.93NL4		vert, cervical	
94.84E-16.93NL4		vert, lumbar	
94.84E-16.93NL4	sheep/goat	Ilium	
94.84E-16.93NL4		3rd Phalanx	
94.84E-16.93NL4		Mandible	
94.84E-16.93NL4		Mandible	large medium-sized mammal
94.84E-16.93NL4		Humerus	
94.84E-16.93NL4		Petris Temporal	
94.84E-16.93NL4		Incisor	
94.84E-16.93NL4		Mandible	
94.84E-16.93NL4		Mandible	dev=subadult
94.84E-16.93NL4		Mandible	
94.84E-16.93NL4	sheep/goat	P4	dev=old adult, very worn, root resorbing
94.84E-16.93NL4	sheep/goat	Molar	light wear
94.84E-16.93NL4	sheep/goat	Metapodial	
94.84E-16.93NL4	sheep/goat	Metapodial	
94.84E-16.93NL4	sheep/goat	central tarsal	dev=fetal/newborn

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Shaft	Indeterminate	1st Phalanx		1	1/4 - 1/	1
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Indeterminate	1st Phalanx		1	<1/4	1
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		Fused	3rd Phalanx		1	3/4+	1
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Indeterminate	Tibia		1	<1/4	0
94.84E-16.93NL4	mm							Indeterminate	Skull		6	fragme	5
94.84E-16.93NL4	mm							Fused	Petris Temporal		1	fragme	1
94.84E-16.93NL4	Reptilia	Testudines				turtle		Indeterminate	Skull		1	fragme	1
94.84E-16.93NL4	mm							Indeterminate	Patella		1	fragme	1
94.84E-16.93NL4	Mammalia	Rodentia				rat/mouse	Distal	Fused	Tibia	Right	1	fragme	0
94.84E-16.93NL4	sm					mongoose si	Distal	Indeterminate	scapula	Left	1	fragme	1
94.84E-16.93NL4	sm							Indeterminate	long bone		30	fragme	13
94.84E-16.93NL4	Aves	Passeriformes				S bird		fused	Coracoid	Left	2	3/4+	1
94.84E-16.93NL4	unident							Indeterminate	indeterminate			fragme	0
94.84E-16.93NL4	unident							Indeterminate	indeterminate			fragme	75
94.84E-16.93NL4	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Indeterminate	Humerus		2	<1/4	7
94.84E-16.93NL4	Aves					bird		fused	1st Phalanx		1	Comple	0
94.84E-16.93NL4	Aves					bird	Distal	Indeterminate	1st Phalanx		1	<1/4	0
94.84E-16.93NL4	unident							Indeterminate	indeterminate			fragme	2
94.84E-16.93NL4	Aves					bird		Indeterminate	long bone		30	fragme	11
94.84E-16.93NL4	Aves					duck-sized b	Shaft	Indeterminate	Femur		1	3/4+	1
94.84E-16.93NL5	lm							Indeterminate	indeterminate		78	fragme	106
94.84E-16.93NL5	lm							Indeterminate	long bone		65	fragme	133
94.84E-16.93NL5	lm							Indeterminate	rib/spine		44	fragme	66
94.84E-16.93NL5	lm						Arch	Indeterminate	vert, lumbar		1	<1/4	9
94.84E-16.93NL5	lm							Indeterminate	vert, cervical		1	<1/4	16
94.84E-16.93NL5	lm							Indeterminate	Vert		3	<1/4	17
94.84E-16.93NL5	lm						Epiphy	Unfused	Vert		1	<1/4	0
94.84E-16.93NL5	lm							fused	Costal Cartilage		1	fragme	2
94.84E-16.93NL5	lm							Indeterminate	Rib		1	<1/4	4
94.84E-16.93NL5	mm							Indeterminate	rib/spine		47	fragme	28
94.84E-16.93NL5	mm							Indeterminate	long bone		91	fragme	66
94.84E-16.93NL5	mm							Fused	Costal Cartilage		2	fragme	4
94.84E-16.93NL5	mm							Indeterminate	indeterminate		41	fragme	16
94.84E-16.93NL5	mm							Indeterminate	Skull		3	fragme	2
94.84E-16.93NL5	lm							Indeterminate	Skull		9	fragme	10

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL4	zebu/buffalo	1st Phalanx	dev=subadult
94.84E-16.93NL4	zebu/buffalo	1st Phalanx	
94.84E-16.93NL4	sheep/goat	3rd Phalanx	
94.84E-16.93NL4	sheep/goat	Tibia	
94.84E-16.93NL4		Skull	
94.84E-16.93NL4		Petris Temporal	
94.84E-16.93NL4	turtle	Skull	
94.84E-16.93NL4		Patella	
94.84E-16.93NL4	rat/mouse	Tibia	extremely long shaft
94.84E-16.93NL4	mongoose size	scapula	identifiable
94.84E-16.93NL4		long bone	b=3
94.84E-16.93NL4	S bird	Coracoid	two sizes of birds here
94.84E-16.93NL4		indeterminate	
94.84E-16.93NL4		indeterminate	b=40
94.84E-16.93NL4	sheep/goat	Humerus	
94.84E-16.93NL4	bird	1st Phalanx	b=1
94.84E-16.93NL4	bird	1st Phalanx	
94.84E-16.93NL4		indeterminate	
94.84E-16.93NL4	bird	long bone	b=4
94.84E-16.93NL4	duck-sized bird	Femur	
94.84E-16.93NL5		indeterminate	b=6
94.84E-16.93NL5		long bone	b=8, pc=2
94.84E-16.93NL5		rib/spine	
94.84E-16.93NL5		vert, lumbar	
94.84E-16.93NL5		vert, cervical	
94.84E-16.93NL5		Vert	
94.84E-16.93NL5		Vert	b=1
94.84E-16.93NL5		Costal Cartilage	
94.84E-16.93NL5		Rib	
94.84E-16.93NL5		rib/spine	b=1, pc=4, c=1
94.84E-16.93NL5		long bone	
94.84E-16.93NL5		Costal Cartila	heavily ossified "c" sections
94.84E-16.93NL5		indeterminate	b=1
94.84E-16.93NL5		Skull	
94.84E-16.93NL5		Skull	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL5	lm							Indeterminate	Mandible		1	fragme	15
94.84E-16.93NL5	lm							Indeterminate	Ischium		2	<1/4	26
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo	Proxim	Indeterminate	Ischium	Left	1	<1/4	10
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	Fused	Femur	Left	1	<1/4	53
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			M2	Right	1	Comple	20
94.84E-16.93NL5	lm							Indeterminate	Innominate		3	fragme	27
94.84E-16.93NL5	lm							Indeterminate	hyoid		1	fragme	3
94.84E-16.93NL5	lm							Indeterminate	Ulna		1	fragme	3
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae			bovid			Incisor	Right	1	Comple	1
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae			bovid			Molar		1	fragme	1
94.84E-16.93NL5	lm								tooth root		1	fragme	1
94.84E-16.93NL5	lm								tooth		4	fragme	2
94.84E-16.93NL5	unident							Indeterminate	indeterminate			fragme	356
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu			Molar		1	Comple	2
94.84E-16.93NL5	lm							Indeterminate	condyle		1	fragme	3
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae			bovid		Indeterminate	Mandibular C	Left	1	Comple	2
94.84E-16.93NL5	lm							Indeterminate	Sternum		1	fragme	1
94.84E-16.93NL5	lm						Distal	Fusing	Metacarpal		1	fragme	3
94.84E-16.93NL5	lm							Indeterminate	Ilium	Right	1	fragme	2
94.84E-16.93NL5	lm							Prox.=Fused;	Scapula	Left	1	Comple	2
94.84E-16.93NL5	lm						Distal	Unfused	Humerus	Left	1	fragme	2
94.84E-16.93NL5	lm						Distal	Indeterminate	Humerus	Left	1	fragme	1
94.84E-16.93NL5	lm							Indeterminate	Scapula		1	fragme	1
94.84E-16.93NL5	lm							Indeterminate	Vert		1	fragme	1
94.84E-16.93NL5	lm							Indeterminate	long bone		2	fragme	2
94.84E-16.93NL5	lm							Indeterminate	indeterminate		2	fragme	2
94.84E-16.93NL5	Mammalia		s/g/d			sheep/goat/d	Arch	Unfused	vert, lumbar	Left	1	1/4 - 1/	4
94.84E-16.93NL5	Mammalia		s/g/d			sheep/goat/d	Arch	Indeterminate	Vert		1	1/4 - 1/	2
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/deer		fused	Vert		4	<1/4	10
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/deer		fused	Mandibular C	Right	1	Comple	3
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		fused	Mandible		2	fragme	3
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/deer		fused	Mandible		5	fragme	8
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/deer			Molar/Premolar		7	fragme	7
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/deer			Incisor		4	fragme	1
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/deer		fused	Ilium		1	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL5		Mandible	cheek area with no teeth
94.84E-16.93NL5		Ischium	
94.84E-16.93NL5	zebu/buffalo	Ischium	
94.84E-16.93NL5	zebu	Femur	
94.84E-16.93NL5	zebu	M2	light wear
94.84E-16.93NL5		Innominate	b=1
94.84E-16.93NL5		hyoid	
94.84E-16.93NL5		Ulna	
94.84E-16.93NL5	bovid	Incisor	I 3
94.84E-16.93NL5	bovid	Molar	
94.84E-16.93NL5		tooth root	
94.84E-16.93NL5		tooth	
94.84E-16.93NL5		indeterminate	b=6, c=4
94.84E-16.93NL5	zebu	Molar	very worn. either zebu or pig
94.84E-16.93NL5		condyle	distal metapodial or distal humerus
94.84E-16.93NL5	bovid	Mandibular C	dev=fetal/newborn, very porous
94.84E-16.93NL5		Sternum	dev=fetal/newborn
94.84E-16.93NL5		Metacarpal	dev=fetal/newborn
94.84E-16.93NL5		Ilium	
94.84E-16.93NL5		Scapula	
94.84E-16.93NL5		Humerus	
94.84E-16.93NL5		Humerus	
94.84E-16.93NL5		Scapula	
94.84E-16.93NL5		Vert	
94.84E-16.93NL5		long bone	
94.84E-16.93NL5		indeterminate	
94.84E-16.93NL5	sheep/goat/de	vert, lumbar	
94.84E-16.93NL5	sheep/goat/de	Vert	
94.84E-16.93NL5	sheep/goat/de	Vert	
94.84E-16.93NL5	sheep/goat/de	Mandibular Condyle	
94.84E-16.93NL5	sheep/goat	Mandible	ventral border of mandible
94.84E-16.93NL5	sheep/goat/de	Mandible	b=2
94.84E-16.93NL5	sheep/goat/de	Molar/Premol	1 P4 included here
94.84E-16.93NL5	sheep/goat/de	Incisor	b=1
94.84E-16.93NL5	sheep/goat/de	Ilium	blade

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/deer		fused	Petris Temporal		2	fragme	2
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/d	Arch	fused	Vert		1	fragme	3
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/d	Distal	fused	Metapodial		1	fragme	1
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Proxim	Fused	1st Phalanx		1	<1/4	1
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	Phalanx		1	<1/4	1
94.84E-16.93NL5	sm							Indeterminate	long bone		5	fragme	2
94.84E-16.93NL5	sm							Indeterminate	Rib		3	fragme	1
94.84E-16.93NL5	sm							fused	Costal Cartilage		1	fragme	0
94.84E-16.93NL5	Osteichthyes					Fish		Indeterminate	rib/spine		3	fragme	0
94.84E-16.93NL5	Reptilia	Testudines				Turtle		fused	long bone		3	fragme	1
94.84E-16.93NL5	sm/bird					sm/bird		Indeterminate	long bone		1	fragme	2
94.84E-16.93NL5	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	fused	ulna	Left	1	1/4 - 1/	212
94.84E-16.93NL5	mm							Indeterminate	long bone		5	fragme	3
94.84E-16.93NL5	Aves					L bird		Indeterminate	long bone		9	fragme	3
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	Fused	Humerus	Left	1	fragme	86
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Proxim	Fused	Ulna	Left	1	1/4 - 1/	90
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Posteri	Fused	Scapula	Left	1	1/4 - 1/	202
94.84E-16.93NL6	lm							Indeterminate	indeterminate		13	fragme	16
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Unfused	Humerus	Left	1	fragme	5
94.84E-16.93NL6	lm							Indeterminate	Ischium		1	fragme	10
94.84E-16.93NL6	lm							Indeterminate	rib/spine		1	fragme	2
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Upper		M3	Left	1	Comple	4
94.84E-16.93NL6	Mammalia	Artiodactyla	Cervidae	Axis	axis	Chital		fused	Basisphenoid		1	Comple	2
94.84E-16.93NL6	Mammalia	Artiodactyla	Cervidae	Axis	axis	Chital	Lower		Incisor	Right	1	Comple	0
94.84E-16.93NL6	Mammalia	Artiodactyla	Cervidae	Axis	axis	Chital	Lower		Premolar		1	Comple	1
94.84E-16.93NL6	Mammalia	Artiodactyla	Cervidae	Axis	axis	Chital		fused	Hyoid		2	Comple	1
94.84E-16.93NL6	Mammalia	Artiodactyla	Cervidae	Axis	axis	Chital	Arch	Indeterminate	Vert		1	1/4 - 1/	3
94.84E-16.93NL6	Mammalia	Artiodactyla	Cervidae	Axis	axis	Chital		Unfused	Vert		1	fragme	2
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		fused	Scapula	Right	1	<1/4	4
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		fused	Ulna		1	<1/4	2
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	fused	1st Phalanx		1	1/4 - 1/	2
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	fused	1st Phalanx		2	<1/4	2
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		fused	accessory carpal		1	1/2 - 3/	1
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Arch	Indeterminate	Vert		1	<1/4	1
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Indeterminate	Scapula		2	<1/4	36

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL5	sheep/goat/de	Petris Temporal	
94.84E-16.93NL5	sheep/goat/de	Vert	
94.84E-16.93NL5	sheep/goat/de	Metapodial	cg=1
94.84E-16.93NL5	goat	1st Phalanx	recently fused
94.84E-16.93NL5	goat	Phalanx	
94.84E-16.93NL5		long bone	
94.84E-16.93NL5		Rib	
94.84E-16.93NL5		Costal Cartilage	
94.84E-16.93NL5	Fish	rib/spine	
94.84E-16.93NL5	Turtle	long bone	
94.84E-16.93NL5	sm/bird	long bone	
94.84E-16.93NL5	zebu	ulna	in many fragments
94.84E-16.93NL5		long bone	
94.84E-16.93NL5	L bird	long bone	
94.84E-16.93NL6	zebu	Humerus	cut=1, chopped
94.84E-16.93NL6	zebu	Ulna	
94.84E-16.93NL6	zebu	Scapula	blade
94.84E-16.93NL6		indeterminate	
94.84E-16.93NL6	goat	Humerus	
94.84E-16.93NL6		Ischium	
94.84E-16.93NL6		rib/spine	
94.84E-16.93NL6	goat	M3	dev=adult, light wear
94.84E-16.93NL6	Chital	Basisphenoid	dev=subadult
94.84E-16.93NL6	Chital	Incisor	I 2 or 3
94.84E-16.93NL6	Chital	Premolar	
94.84E-16.93NL6	Chital	Hyoid	
94.84E-16.93NL6	Chital	Vert	
94.84E-16.93NL6	Chital	Vert	
94.84E-16.93NL6	sheep/goat	Scapula	
94.84E-16.93NL6	sheep/goat	Ulna	
94.84E-16.93NL6	goat	1st Phalanx	
94.84E-16.93NL6	goat	1st Phalanx	b=1
94.84E-16.93NL6	goat	accessory ca	accessory carpal
94.84E-16.93NL6	goat	Vert	b=1
94.84E-16.93NL6	zebu	Scapula	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Bos		zebu/gaur	Distal	Unfused	Ilium	Left	1	<1/4	15
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo		fused	3rd Phalanx		1	3/4+	14
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Bos/Bubalus		zebu/buffalo/gaur			Incisor	Left	1	Comple	3
94.84E-16.93NL6	Mammalia								Incisor		1	fragme	2
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae	Bos	gaurus	gaur		Fused	vert, caudal		1	Comple	4
94.84E-16.93NL6	Mammalia	Artiodactyla	Bovidae			L bovid	Distal	Unerupted	Metapodial		1	fragme	4
94.84E-16.93NL6	lm							Indeterminate	Carpal/tarsal		1	fragme	1
94.84E-16.93NL6	Osteichthyes					fish		Indeterminate	Skull		2	fragme	0
94.84E-16.93NL6	Reptilia	Testudines				turtle		Indeterminate	Skull		1	fragme	1
94.84E-16.93NL6	Mammalia	Carnivora	Herpestidae	Herpestes	edwardsii	mongoose	Proxim	fused	Radius		1	fragme	0
94.84E-16.93NL6	Mammalia	Carnivora	Herpestidae	Herpestes	edwardsii	mongoose		fused	Innominate	Left	1	fragme	0
94.84E-16.93NL6	Mammalia	Carnivora	Herpestidae	Herpestes	edwardsii	mongoose		fused	Ilium	Left	1	fragme	0
94.84E-16.93NL6	Reptilia	Testudines				turtle		fused	Maxilla	Right	1	Comple	5
94.84E-16.93NL6	Reptilia	Testudines				turtle		fused	carapace		4	Comple	7
94.84E-16.93NL6	Reptilia	Testudines				turtle		fused	Carapace		3	fragme	1
94.84E-16.93NL6	Reptilia	Squamata				snake		fused	Vert		2	Comple	3
94.84E-16.93NL6	lm								Molar		5	fragme	5
94.84E-16.93NL6	lm								Tooth root		8	fragme	2
94.84E-16.93NL6	lm								Molar		3	fragme	1
94.84E-16.93NL6	lm							Fused	Petris Temporal		2	Comple	3
94.84E-16.93NL6	lm							Indeterminate	Skull		6	fragme	13
94.84E-16.93NL6	lm						Arch	Indeterminate	Vert		4	<1/4	15
94.84E-16.93NL6	lm						Centru	Unfused	Vert		1	<1/4	11
94.84E-16.93NL6	lm							Indeterminate	long bone		52	fragme	98
94.84E-16.93NL6	lm							Indeterminate	indeterminate		72	fragme	93
94.84E-16.93NL6	lm							Indeterminate	rib/spine		62	fragme	161
94.84E-16.93NL6	mm							Indeterminate	rib/spine		35	fragme	20
94.84E-16.93NL6	mm							Fused	Costal cartilage		1	fragme	0
94.84E-16.93NL6	mm							Fused	Petris Temporal		2	Comple	1
94.84E-16.93NL6	mm							Indeterminate	Skull		1	fragme	1
94.84E-16.93NL6	mm						Arch	Indeterminate	vert, cervical	Left	1	1/2	2
94.84E-16.93NL6	mm						Centru	Unfused	Vert		2	<1/4	1
94.84E-16.93NL6	mm							Indeterminate	long bone		53	fragme	42
94.84E-16.93NL6	mm							Indeterminate	indeterminate		35	fragme	15
94.84E-16.93NL6	lm							fused	Costal cartilage		1	fragme	4

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL6	zebu/gaur	Ilium	very large for B. indicus (Gaur?)
94.84E-16.93NL6	zebu/buffalo	3rd Phalanx	plantar surface missing
94.84E-16.93NL6	zebu/buffalo/ga	Incisor	I2 or I3 (very large)
94.84E-16.93NL6		Incisor	very worn; species and size class indet
94.84E-16.93NL6	gaur	vert, caudal	
94.84E-16.93NL6	L bovid	Metapodial	dev=fetal/newborn
94.84E-16.93NL6		Carpal/tarsal	
94.84E-16.93NL6	fish	Skull	
94.84E-16.93NL6	turtle	Skull	
94.84E-16.93NL6	mongoose	Radius	dev/adult
94.84E-16.93NL6	mongoose	Innominate	dev/adult
94.84E-16.93NL6	mongoose	Ilium	dev/adult
94.84E-16.93NL6	turtle	Maxilla	probably soft-shell
94.84E-16.93NL6	turtle	carapace	
94.84E-16.93NL6	turtle	Carapace	
94.84E-16.93NL6	snake	Vert	two species represented here
94.84E-16.93NL6		Molar	
94.84E-16.93NL6		Tooth root	
94.84E-16.93NL6		Molar	
94.84E-16.93NL6		Petris Temporal	
94.84E-16.93NL6		Skull	
94.84E-16.93NL6		Vert	
94.84E-16.93NL6		Vert	
94.84E-16.93NL6		long bone	b=4
94.84E-16.93NL6		indeterminate	b=5, c=1
94.84E-16.93NL6		rib/spine	b=6
94.84E-16.93NL6		rib/spine	b=4
94.84E-16.93NL6		Costal cartilage	
94.84E-16.93NL6		Petris Temporal	
94.84E-16.93NL6		Skull	
94.84E-16.93NL6		vert, cervical	
94.84E-16.93NL6		Vert	
94.84E-16.93NL6		long bone	b=4
94.84E-16.93NL6		indeterminate	b=3
94.84E-16.93NL6		Costal cartilage	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL6	sm							Indeterminate	long bone		12	fragme	4
94.84E-16.93NL6	sm							Indeterminate	Vert		1	fragme	0
94.84E-16.93NL6	sm							Indeterminate	Skull		1	fragme	0
94.84E-16.93NL6	sm							Indeterminate	Rib		5	fragme	0
94.84E-16.93NL6	Mammalia						Arch	Unfused	Vert		1	fragme	0
94.84E-16.93NL6	Unident							Indeterminate	indeterminate			fragme	18
94.84E-16.93NL6	Aves					S bird	Distal	Indeterminate	Ulna		1	1/4 - 1/	1
94.84E-16.93NL6	Aves					L bird		Indeterminate	long bone		8	fragme	6
94.84E-16.93NL6	Aves					bird		Indeterminate	long bone		21	fragme	5
94.84E-16.93NL6	lm							Indeterminate	long bone		3	fragme	4
94.84E-16.93NL6	mm							Indeterminate	rib/spine		4	fragme	2
94.84E-16.93NL6	mm							Indeterminate	long bone		2	fragme	2
94.84E-16.93NL6	lm/mm							Indeterminate	indeterminate		1	fragme	0
94.84E-16.93NL6-8	lm							Indeterminate	Skull		2	fragme	3
94.84E-16.93NL6-8	lm							Indeterminate	rib/spine		2	fragme	1
94.84E-16.93NL6-8	lm							Indeterminate	indeterminate		9	fragme	5
94.84E-16.93NL6-8	lm							Indeterminate	long bone		8	fragme	29
94.84E-16.93NL6-8	mm							Indeterminate	long bone		8	fragme	4
94.84E-16.93NL6-8	mm							Indeterminate	indeterminate		2	fragme	1
94.84E-16.93NL6-8	mm						Shaft	Recently Fus	Metapodial		1	fragme	1
94.84E-16.93NL6-8	mm							Indeterminate	rib/spine		4	fragme	1
94.84E-16.93NL6-8	mm							fused	Costal Cartilage		1	fragme	0
94.84E-16.93NL6-8	unident							Indeterminate	indeterminate			fragment	
94.84E-16.93NL6-8	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Lower		Molar		1	fragme	11
94.84E-16.93NL6-8	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Indeterminate	Metapodial		1	fragme	2
94.84E-16.93NL6-8	Mammalia	Artiodactyla	Bovidae			bovid		Recently Eru	Molar		1	Comple	8
94.84E-16.93NL6-8	Aves					L bird		Indeterminate	long bone		1	fragme	1
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae			L bovid	Arch	Fused	Vert		1	3/4+	40
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae			bovid	Upper		Premolar	Right	1	Comple	8
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae	Bos		zebu/gaur		fused	Mandibular C	Right	1	<1/4	29
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae	Bos		zebu/gaur	Lower		Molar	Left	1	Comple	12
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae	Bos		zebu/gaur		Fused	ischium	Left	1	1/4	14
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae	Bos		zebu/gaur		Fused	Ilium	Left	1	1/4	14
94.84E-16.93NL7	Mammalia	Artiodactyla				L artiodactyl	Distal	Fused	Radius	Right	1	<1/4	15
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae			bovid	Centrui	Fused	vert, thoracic		1	<1/4	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL6		long bone	b=1
94.84E-16.93NL6		Vert	
94.84E-16.93NL6		Skull	
94.84E-16.93NL6		Rib	
94.84E-16.93NL6		Vert	dev=fetal/newborn
94.84E-16.93NL6		indeterminate	b=8
94.84E-16.93NL6	S bird	Ulna	duck-sized bird
94.84E-16.93NL6	L bird	long bone	
94.84E-16.93NL6	bird	long bone	
94.84E-16.93NL6		long bone	b=3
94.84E-16.93NL6		rib/spine	b=1
94.84E-16.93NL6		long bone	b=2
94.84E-16.93NL6		indeterminate	
94.84E-16.93NL6-8		Skull	wall cleaning
94.84E-16.93NL6-8		rib/spine	b=1, wall cleaning
94.84E-16.93NL6-8		indeterminate	b=2, wall cleaning
94.84E-16.93NL6-8		long bone	b=3, wall cleaning
94.84E-16.93NL6-8		long bone	b=3, wall cleaning
94.84E-16.93NL6-8		indeterminate	wall cleaning
94.84E-16.93NL6-8		Metapodial	wall cleaning
94.84E-16.93NL6-8		rib/spine	wall cleaning
94.84E-16.93NL6-8		Costal Cartila	wall cleaning
94.84E-16.93NL6-8		indeterminate	b=4, c=2
94.84E-16.93NL6-8	zebu	Molar	worn -- from wall cleaning
94.84E-16.93NL6-8	sheep/goat/de	Metapodial	wall cleaning
94.84E-16.93NL6-8	bovid	Molar	from S wall at 150 cm bsd E
94.84E-16.93NL6-8	L bird	long bone	wall cleaning
94.84E-16.93NL7	L bovid	Vert	
94.84E-16.93NL7	bovid	Premolar	
94.84E-16.93NL7	zebu/gaur	Mandibular Condyle	
94.84E-16.93NL7	zebu/gaur	Molar	
94.84E-16.93NL7	zebu/gaur	ischium	
94.84E-16.93NL7	zebu/gaur	Ilium	
94.84E-16.93NL7	L artiodactyl	Radius	
94.84E-16.93NL7	bovid	vert, thoracic	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	Scapula	Left	1	<1/4	6
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		Fused	Mandible	Left	1	fragme	19
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	Femur	Right	1	<1/4	9
94.84E-16.93NL7	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Centru	Unfused	vert, cervical		1	1/4 - 1/	6
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	Tibia	Left	1	fragme	18
94.84E-16.93NL7	mm							Indeterminate	Femur		1	fragme	15
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat		Fused	1st Phalanx		1	1/4 - 1/	3
94.84E-16.93NL7	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Arch	Fused	Vert		1	<1/4	2
94.84E-16.93NL7	sm						Proxim	Fused	Femur	Left	1	fragme	1
94.84E-16.93NL7	sm						Distal	Indeterminate	Scapula	Left	1	1/4 - 1/	1
94.84E-16.93NL7	Mammalia	Artiodactyla	Suidae	Sus		pig		Prox.=Fused;	2nd Metapodial		1	Comple	1
94.84E-16.93NL7	Reptilia	Squamata				snake		fused	Vert		1	Comple	1
94.84E-16.93NL7	Osteichthyes	Siluriformes	Ictaluridae			catfish	Proxim	fused	Pectoral spin	Right	1	1/4 - 1/	2
94.84E-16.93NL7	lm								Incisor	Right	1	Comple	1
94.84E-16.93NL7	lm							Indeterminate	rib/spine		2	fragme	1
94.84E-16.93NL7	lm/mm							Indeterminate	indeterminate		3	fragme	1
94.84E-16.93NL7	lm							Indeterminate	long bone		31	fragme	144
94.84E-16.93NL7	lm							Indeterminate	indeterminate		50	fragme	14
94.84E-16.93NL7	lm							Indeterminate	Skull		6	fragme	20
94.84E-16.93NL7	lm							Indeterminate	rib/spine		30	fragme	131
94.84E-16.93NL7	lm							Unfused	Vert		1	<1/4	1
94.84E-16.93NL7	mm						Arch	Indeterminate	Vert		1	<1/4	1
94.84E-16.93NL7	mm							Indeterminate	Skull		4	fragme	4
94.84E-16.93NL7	mm							Indeterminate	long bone		29	fragme	27
94.84E-16.93NL7	mm							Indeterminate	rib/spine		39	fragme	23
94.84E-16.93NL7	mm							Indeterminate	indeterminate		34	fragme	15
94.84E-16.93NL7	sm							Indeterminate	long bone		9	fragme	3
94.84E-16.93NL7	Reptilia	Testudines				turtle		fused	long bone		1	fragme	1
94.84E-16.93NL7	unident							Indeterminate	indeterminate			fragme	1
94.84E-16.93NL7	Reptilia	Testudines				turtle		Indeterminate	Skull		1	fragme	0
94.84E-16.93NL7	lm								Molar		6	fragme	4
94.84E-16.93NL7	mm								Molar		4	fragme	1
94.84E-16.93NL7	unident							Indeterminate	indeterminate			fragme	32
94.84E-16.93NL7	Aves					bird		Indeterminate	long bone		10	fragme	4
94.84E-16.93NL7	lm							Indeterminate	rib/spine		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL7	goat	Scapula	
94.84E-16.93NL7	goat	Mandible	dev=adult, with P2, P3, P4, M1
94.84E-16.93NL7	goat	Femur	
94.84E-16.93NL7	sheep/goat/de	vert, cervical	b=1, left half of vert
94.84E-16.93NL7	goat	Tibia	
94.84E-16.93NL7		Femur	
94.84E-16.93NL7	goat	1st Phalanx	
94.84E-16.93NL7	sheep/goat	Vert	
94.84E-16.93NL7		Femur	
94.84E-16.93NL7		Scapula	
94.84E-16.93NL7	pig	2nd Metapodial	
94.84E-16.93NL7	snake	Vert	
94.84E-16.93NL7	catfish	Pectoral spin	standard length 50 -60 mm
94.84E-16.93NL7		Incisor	I3 or 4
94.84E-16.93NL7		rib/spine	
94.84E-16.93NL7		indeterminate	b=2
94.84E-16.93NL7		long bone	b=2
94.84E-16.93NL7		indeterminate	b=3
94.84E-16.93NL7		Skull	
94.84E-16.93NL7		rib/spine	b=1
94.84E-16.93NL7		Vert	
94.84E-16.93NL7		Vert	b=1
94.84E-16.93NL7		Skull	
94.84E-16.93NL7		long bone	b=1
94.84E-16.93NL7		rib/spine	b=3
94.84E-16.93NL7		indeterminate	b=5
94.84E-16.93NL7		long bone	b=1, c=1
94.84E-16.93NL7	turtle	long bone	
94.84E-16.93NL7		indeterminate	
94.84E-16.93NL7	turtle	Skull	
94.84E-16.93NL7		Molar	
94.84E-16.93NL7		Molar	b=1
94.84E-16.93NL7		indeterminate	b=17, c=3
94.84E-16.93NL7	bird	long bone	b=1
94.84E-16.93NL7		rib/spine	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL7	Im							Indeterminate	Rib		3	fragme	1
94.84E-16.93NL8	Mammalia	Carnivora	Felidae	Panthera	pardus	leopard or pa	Distal	Fused	Humerus	Left	1	1/4 - 1/	37
94.84E-16.93NL8	Mammalia	Carnivora	Canidae	Canis		canis sp.	Proxim	Fused	Metapodial		1	fragme	1
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae			bovid			M2	Upper	1	Comple	21
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	1st Phalanx		1	1/2 - 3/	19
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	2nd Phalanx	Left	1	Comple	21
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae			bovid		Erupted	Molar	lower	1	Comple	20
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae			bovid			Incisor	Left	1	Comple	1
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae			bovid			Incisor	Left	1	Comple	2
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo		fused	Mandible		1	<1/4	24
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae	Bubalus	bubalis	buffalo		Fused	Astragalus	Right	1	<1/4	9
94.84E-16.93NL8	Im							Indeterminate	long bone		1	fragme	14
94.84E-16.93NL8	Mammalia	Artiodactyla	Suidae	Sus		pig		Prox.=Fused;	4th Metatarsa	Left	1	3/4+	6
94.84E-16.93NL8	Mammalia	Artiodactyla	Suidae	Sus		pig		Erupted	Maxilla w/ pre	Right	1	fragme	13
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae			L bovid	Distal	Unfused	Scapula	Left	1	<1/4	16
94.84E-16.93NL8	Mammalia	Artiodactyla	Suidae	Sus		pig	Upper		Premolar	Left	1	fragme	4
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae			bovid		Fused	3rd Tarsal	Left	1	Comple	6
94.84E-16.93NL8	Mammalia	Artiodactyla	Suidae	Sus		pig	Proxim	Fused	Metapodial		1	fragme	3
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat		Unerupted	Molar		1	fragme	1
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Upper		M2	Right	1	Comple	9
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/deer			Molar	Left	1	Comple	1
94.84E-16.93NL8	Mammalia		s/g/d			sheep/goat/d	Distal	Unfused	Calcaneus	Left	1	3/4+	7
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae	Ovis/Capra/Cervid		sheep/goat/deer		Fused	hyoid		1	<1/4	1
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Indeterminate	1st Phalanx		1	1/4	1
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Proxim	Indeterminate	Radius	Left	2	<1/4	6
94.84E-16.93NL8	Mammalia	Rodentia				rat/mouse		fused	Innominate	Left	1	1/2 - 3/	0
94.84E-16.93NL8	reptilia/amphibia					reptile/amphibian		Indeterminate	long bone		2	fragme	1
94.84E-16.93NL8	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	vert, caudal		1	Comple	2
94.84E-16.93NL8	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Epihyal	Right	1	Comple	0
94.84E-16.93NL8	Osteichthyes	Siluriformes	Ictaluridae			catfish		Indeterminate	Skull		1	fragme	0
94.84E-16.93NL8	Reptilia	Testudines	Emydidae			box turtle		fused	carapace		1	Comple	1
94.84E-16.93NL8	Reptilia	Testudines				Turtle		fused	Ilium	Right	1	Comple	0
94.84E-16.93NL8	Reptilia	Testudines				Turtle		fused	Ischium		1	Comple	0
94.84E-16.93NL8	Mammalia	Rodentia	Sciurid			cf. squirrel	proxim	Indeterminate	Rib		1	fragme	0
94.84E-16.93NL8	Mammalia	Lagomorpha	Leporidae	Lepus	nigricollus	Indian Hare		fused	Occipital		1	fragme	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL7		Rib	w=3, pol=3
94.84E-16.93NL8	leopard or pan	Humerus	Bd 49.1
94.84E-16.93NL8	canis sp.	Metapodial	
94.84E-16.93NL8	bovid	M2	worn
94.84E-16.93NL8	zebu	1st Phalanx	
94.84E-16.93NL8	zebu	2nd Phalanx	Bp 30.5 Bd 26.1 GL 46.2
94.84E-16.93NL8	bovid	Molar	recently erupted, light wear
94.84E-16.93NL8	bovid	Incisor	I2
94.84E-16.93NL8	bovid	Incisor	I3?
94.84E-16.93NL8	buffalo	Mandible	coronoid process
94.84E-16.93NL8	buffalo	Astragalus	
94.84E-16.93NL8		long bone	
94.84E-16.93NL8	pig	4th Metatarsal	
94.84E-16.93NL8	pig	Maxilla w/ premolar	
94.84E-16.93NL8	L bovid	Scapula	
94.84E-16.93NL8	pig	Premolar	dev=old adult
94.84E-16.93NL8	bovid	3rd Tarsal	
94.84E-16.93NL8	pig	Metapodial	
94.84E-16.93NL8	sheep/goat	Molar	
94.84E-16.93NL8	sheep/goat	M2	very large, tall crown
94.84E-16.93NL8	sheep/goat/de	Molar	light wear
94.84E-16.93NL8	sheep/goat/de	Calcaneus	
94.84E-16.93NL8	sheep/goat/de	hyoid	
94.84E-16.93NL8	sheep/goat	1st Phalanx	
94.84E-16.93NL8	sheep/goat	Radius	dev=fetal/newborn
94.84E-16.93NL8	rat/mouse	Innominate	
94.84E-16.93NL8	reptile/amphibi	long bone	
94.84E-16.93NL8	catfish	vert, caudal	large; standard length 60 - 70 mm
94.84E-16.93NL8	catfish	Epihyal	40-45 standard length
94.84E-16.93NL8	catfish	Skull	
94.84E-16.93NL8	box turtle	carapace	probably soft-shell
94.84E-16.93NL8	Turtle	Ilium	
94.84E-16.93NL8	Turtle	Ischium	
94.84E-16.93NL8	cf. squirrel	Rib	
94.84E-16.93NL8	Indian Hare	Occipital	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPl	grams
94.84E-16.93NL8	lm							Indeterminate	Rib		48	fragme	306
94.84E-16.93NL8	lm							Indeterminate	long bone		57	fragme	188
94.84E-16.93NL8	lm							Indeterminate	indeterminate		66	fragme	97
94.84E-16.93NL8	lm							Indeterminate	Vert		3	fragme	21
94.84E-16.93NL8	lm							Indeterminate	Skull		4	fragme	13
94.84E-16.93NL8	lm							Indeterminate	Tooth		4	fragme	1
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae			L bovid	Spine	fused	Vert		1	<1/4	10
94.84E-16.93NL8	Mammalia	Artiodactyla	Bovidae			L bovid	Proxim	Indeterminate	Ulna	Left	1	<1/4	12
94.84E-16.93NL8	lm							Unfused	Skull		2	fragme	1
94.84E-16.93NL8	lm							Unerupted	long bone		4	fragme	5
94.84E-16.93NL8	mm							Indeterminate	Skull		11	fragme	12
94.84E-16.93NL8	mm							Indeterminate	rib/spine		32	fragme	22
94.84E-16.93NL8	mm							Indeterminate	Vert		1	fragme	1
94.84E-16.93NL8	mm							Fused	ilium/ischium	Misc.	1	fragme	3
94.84E-16.93NL8	mm							Indeterminate	long bone		59	fragme	54
94.84E-16.93NL8	mm							Indeterminate	indeterminate		27	fragme	17
94.84E-16.93NL8	sm							Indeterminate	long bone		3	fragme	2
94.84E-16.93NL8	sm							Unfused	Vert		1	1/4 - 1/	1
94.84E-16.93NL8	sm							Indeterminate	Rib		1	fragme	0
94.84E-16.93NL8	sm							Indeterminate	long bone		6	fragme	1
94.84E-16.93NL8	Unident							Indeterminate	indeterminate			fragme	38
94.84E-16.93NL8	Aves					L bird		Indeterminate	long bone		3	fragme	3
94.84E-16.93NL8	Aves					M bird		Indeterminate	long bone		3	fragme	1
94.84E-16.93NL9	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Cleithrum	Right	1	Comple	0
94.84E-16.93NL9	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	Webberian Appartus		1	Comple	0
94.84E-16.93NL9	Osteichthyes	Siluriformes	Ictaluridae			catfish		Fused	Coracoid		1	Comple	0
94.84E-16.93NL9	Osteichthyes	Siluriformes	Ictaluridae			catfish		Fused	Pterygiophore		1	Comple	2
94.84E-16.93NL9	Osteichthyes					fish		Indeterminate	Skull		2	fragme	0
94.84E-16.93NL9	Reptilia	Testudines				Turtle		Fused	Pubis	Left	1	Comple	0
94.84E-16.93NL9	sm							Indeterminate	long bone		12	fragme	2
94.84E-16.93NL9	sm							Indeterminate	Rib		3	<1/4	1
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Proxim	Fused	Scapula	Right	1	Comple	0
94.84E-16.93NL9	sm/bird					sm/bird		Indeterminate	Skull		1	fragme	0
94.84E-16.93NL9	lm/mm							Indeterminate	long bone		2	fragme	2
94.84E-16.93NL9	lm/mm						Shaft	Recently Fus	long bone		1	fragme	1

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL8		Rib	b=1
94.84E-16.93NL8		long bone	b=11
94.84E-16.93NL8		indeterminate	b=5
94.84E-16.93NL8		Vert	
94.84E-16.93NL8		Skull	
94.84E-16.93NL8		Tooth	
94.84E-16.93NL8	L bovid	Vert	
94.84E-16.93NL8	L bovid	Ulna	
94.84E-16.93NL8		Skull	dev=fetal/newborn
94.84E-16.93NL8		long bone	dev=fetal/newborn, b=1
94.84E-16.93NL8		Skull	
94.84E-16.93NL8		rib/spine	b=10
94.84E-16.93NL8		Vert	
94.84E-16.93NL8		ilium/ischium	posterior border fused
94.84E-16.93NL8		long bone	b=10
94.84E-16.93NL8		indeterminate	b=10
94.84E-16.93NL8		long bone	b=1
94.84E-16.93NL8		Vert	b=1
94.84E-16.93NL8		Rib	
94.84E-16.93NL8		long bone	
94.84E-16.93NL8		indeterminate	b=7
94.84E-16.93NL8	L bird	long bone	
94.84E-16.93NL8	M bird	long bone	
94.84E-16.93NL9	catfish	Cleithrum	standard length 25 - 30 cm
94.84E-16.93NL9	catfish	Webberian A	standard length 20 - 40
94.84E-16.93NL9	catfish	Coracoid	standard length 20 - 40
94.84E-16.93NL9	catfish	Pterygiophore	standard length 40 - 60
94.84E-16.93NL9	fish	Skull	b=1
94.84E-16.93NL9	Turtle	Pubis	
94.84E-16.93NL9		long bone	b=1
94.84E-16.93NL9		Rib	
94.84E-16.93NL9	sheep/goat	Scapula	dev=fetal/newborn
94.84E-16.93NL9	sm/bird	Skull	
94.84E-16.93NL9		long bone	w=2, worked bones - one with high polish and one with striations
94.84E-16.93NL9		long bone	dev=fetal/newborn

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL9	lm/mm							Indeterminate	long bone		1	fragme	0
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu	Distal	Fused	Metatarsal		1	1/4 - 1/	74
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae	Bos	indicus	zebu		Fused	Sesamoid		2	Comple	7
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae			bovid	Distal	fused	Radius		1	fragme	23
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae			bovid		fused	Patella	Left	1	Comple	34
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae			bovid		fused	Maxilla	Left	2	fragme	51
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae			bovid	Arch	Indeterminate	Vert		1	<1/4	7
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae			bovid	Lower		Molar	Right	1	Comple	19
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae			bovid	Upper		Premolar	Left	1	Comple	5
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae			bovid			Molar		2	fragme	2
94.84E-16.93NL9	lm							fused	Carpal/tarsal		1	Comple	15
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Fused	Humerus		1	1/2 - 3/	19
94.84E-16.93NL9	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	fused	Ulna	Right	1	<1/4	1
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Shaft	fused	Radius	Left	1	<1/4	2
94.84E-16.93NL9	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Shaft	Indeterminate	Humerus		1	<1/4	3
94.84E-16.93NL9	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Shaft	Indeterminate	Femur	Right	1	<1/4	3
94.84E-16.93NL9	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Shaft	Unfused	Femur		1	1/2	5
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Upper		DP3		1	Comple	0
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae			bovid		fused	Mandibular C	Right	1	Comple	2
94.84E-16.93NL9	mm							Indeterminate	Mandible		1	<1/4	2
94.84E-16.93NL9	Mammalia	Artiodactyla	Suidae	Sus		pig		fused	Astragalus		1	3/4+	4
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae	Ovis/Capra		sheep/goat	Distal	Unfused	1st Phalanx		1	3/4+	2
94.84E-16.93NL9	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Proxim	Unfused	Phalanx		1	<1/4	0
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Proxim	Fused	1st Phalanx		1	1/2 - 3/	2
94.84E-16.93NL9	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		Unfused	vert, lumbar		1	1/4 - 1/	4
94.84E-16.93NL9	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Distal	Indeterminate	2nd Phalanx		1	<1/4	0
94.84E-16.93NL9	mm						Proxim	Fused	Femur		1	<1/4	2
94.84E-16.93NL9	mm							Indeterminate	Scapula		1	fragme	2
94.84E-16.93NL9	Mammalia	Artiodactyla	Cervidae	Axis	axis	Chital		Fused	Skull		1	fragme	1
94.84E-16.93NL9	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/d	Lower		Incisor	Left	1	Comple	1
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae			bovid		fused	2nd Metatars	Left	1	Comple	3
94.84E-16.93NL9	mm						Proxim	Indeterminate	Metapodial		1	fragme	2
94.84E-16.93NL9	Reptilia					reptile		fused	Vert		1	Comple	1
94.84E-16.93NL9	Reptilia	Testudines				Turtle		fused	Plastron		1	fragme	1
94.84E-16.93NL9	Osteichthyes	Siluriformes	Ictaluridae			catfish		fused	ceratohyal	Left	1	Comple	0

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL9		long bone	
94.84E-16.93NL9	zebu	Metatarsal	
94.84E-16.93NL9	zebu	Sesamoid	
94.84E-16.93NL9	bovid	Radius	
94.84E-16.93NL9	bovid	Patella	
94.84E-16.93NL9	bovid	Maxilla	
94.84E-16.93NL9	bovid	Vert	
94.84E-16.93NL9	bovid	Molar	M1 or M2 with Moderate wear
94.84E-16.93NL9	bovid	Premolar	P2 with Heavy wear
94.84E-16.93NL9	bovid	Molar	
94.84E-16.93NL9		Carpal/tarsal	
94.84E-16.93NL9	goat	Humerus	
94.84E-16.93NL9	sheep/goat/de	Ulna	
94.84E-16.93NL9	sheep/goat	Radius	
94.84E-16.93NL9	sheep/goat/de	Humerus	
94.84E-16.93NL9	sheep/goat/de	Femur	b=1
94.84E-16.93NL9	sheep/goat/de	Femur	dev=fetal/newborn
94.84E-16.93NL9	sheep/goat	DP3	very worn deciduous premolar, roots resorbed
94.84E-16.93NL9	bovid	Mandibular C	dev=subadul
94.84E-16.93NL9		Mandible	
94.84E-16.93NL9	pig	Astragalus	dev=subadult, weathered
94.84E-16.93NL9	sheep/goat	1st Phalanx	
94.84E-16.93NL9	sheep/goat/de	Phalanx	phalanx 1 or 2
94.84E-16.93NL9	goat	1st Phalanx	
94.84E-16.93NL9	sheep/goat/de	vert, lumbar	
94.84E-16.93NL9	sheep/goat/de	2nd Phalanx	
94.84E-16.93NL9		Femur	
94.84E-16.93NL9		Scapula	
94.84E-16.93NL9	Chital	Skull	
94.84E-16.93NL9	sheep/goat/de	Incisor	I3 or I4
94.84E-16.93NL9	bovid	2nd Metatars	vestigial 2nd metatarsal
94.84E-16.93NL9		Metapodial	
94.84E-16.93NL9	reptile	Vert	
94.84E-16.93NL9	Turtle	Plastron	
94.84E-16.93NL9	catfish	ceratohyal	standard length 50 - 60

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL9	Reptilia	Testudines				Turtle		fused	Dentary	Left	1	fragme	3
94.84E-16.93NL9	Osteichthyes/Reptilia					fish/reptile		Indeterminate	indeterminate		1	fragme	1
94.84E-16.93NL9	Osteichthyes	Siluriformes	Ictaluridae			catfish	Distal	fused	Coracoid		1	fragme	1
94.84E-16.93NL9	Reptilia	Testudines				Turtle		Indeterminate	Skull		1	fragme	1
94.84E-16.93NL9	lm								Molar		5	fragme	1
94.84E-16.93NL9	Mammalia	Artiodactyla		Ovis/Capra/Cervid		sheep/goat/deer		fused	Patella		1	1/4 - 1/	2
94.84E-16.93NL9	Mammalia	Artiodactyla	Bovidae	Capra	hircus	goat	Distal	Unfused	Tibia	Right	1	<1/4	1
94.84E-16.93NL9	mm						Proxim	Indeterminate	Rib		1	1/4 - 1/	0
94.84E-16.93NL9	mm						Arch	Indeterminate	Vert		2	<1/4	2
94.84E-16.93NL9	mm							Indeterminate	long bone		40	fragme	42
94.84E-16.93NL9	mm							Indeterminate	indeterminate		47	fragme	34
94.84E-16.93NL9	mm							Indeterminate	rib/spine		55	fragme	39
94.84E-16.93NL9	sm							Indeterminate	Rib		1	fragme	0
94.84E-16.93NL9	mm							Indeterminate	Skull		6	fragme	4
94.84E-16.93NL9	lm							Indeterminate	long bone		43	fragme	114
94.84E-16.93NL9	lm							Indeterminate	Skull		10	fragme	19
94.84E-16.93NL9	lm								Tooth root		1	fragme	1
94.84E-16.93NL9	lm								Molar		1	fragme	1
94.84E-16.93NL9	lm							Indeterminate	rib/spine		46	fragme	62
94.84E-16.93NL9	lm						Arch	Indeterminate	Vert		3	<1/4	12
94.84E-16.93NL9	lm							Unfused	Vert		3	<1/4	5
94.84E-16.93NL9	lm							Indeterminate	indeterminate		47	fragme	65
94.84E-16.93NL9	Mammalia								horn core		5	fragme	41
94.84E-16.93NL9	unident							Indeterminate	indeterminate			fragme	38
94.84E-16.93NL9	lm							Indeterminate	long bone		1	fragme	3
94.84E-16.93NL9	Mammalia	Chiroptera	Pteropodinae	Pteropus	giganteus	Flying Fox	Lower		Premolar	Right	1	Comple	1
94.84E-16.93NL9	lm							Indeterminate	Mandible		1	fragme	8
94.84E-16.93NL9	lm							Indeterminate	long bone		2	fragme	5
94.84E-16.93NL9	mm							Indeterminate	long bone		2	fragme	4
94.84E-16.93NL9	mm							Indeterminate	indeterminate		3	fragme	2
94.84E-16.93NL9	Aves					S bird		fused	Coracoid	Left	1	Comple	0
94.84E-16.93NL9	Aves					L bird		Indeterminate	long bone		12	fragme	5
94.84E-16.93NL9	Aves	Galliformes	Phasianidae	Pavo	cristatus	Indian Peafo	Proxim	fused	Femur	Left	1	1/4	2
94.84E-16.93NL9	Aves					bird		Indeterminate	Carpometacarpus		1	fragme	0
94.84E-16.93NL9	Aves					L bird		Indeterminate	long bone		3	fragme	2

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL9	Turtle	Dentary	b=1
94.84E-16.93NL9	fish/reptile	indeterminate	turtle or fish bone with artic. fact
94.84E-16.93NL9	catfish	Coracoid	standard length 60 - 70?
94.84E-16.93NL9	Turtle	Skull	
94.84E-16.93NL9		Molar	very worn
94.84E-16.93NL9	sheep/goat/de	Patella	
94.84E-16.93NL9	goat	Tibia	
94.84E-16.93NL9		Rib	dev=fetal/newborn
94.84E-16.93NL9		Vert	
94.84E-16.93NL9		long bone	b=5, c=2
94.84E-16.93NL9		indeterminate	b=11
94.84E-16.93NL9		rib/spine	b=13, c=2
94.84E-16.93NL9		Rib	
94.84E-16.93NL9		Skull	
94.84E-16.93NL9		long bone	b=11
94.84E-16.93NL9		Skull	b=2
94.84E-16.93NL9		Tooth root	
94.84E-16.93NL9		Molar	
94.84E-16.93NL9		rib/spine	b=2
94.84E-16.93NL9		Vert	
94.84E-16.93NL9		Vert	b=1
94.84E-16.93NL9		indeterminate	b=7
94.84E-16.93NL9		horn core	all pieces are weathered
94.84E-16.93NL9		indeterminate	
94.84E-16.93NL9		long bone	w=1, worked long bone stylus
94.84E-16.93NL9	Flying Fox	Premolar	
94.84E-16.93NL9		Mandible	
94.84E-16.93NL9		long bone	
94.84E-16.93NL9		long bone	b=1
94.84E-16.93NL9		indeterminate	b=1
94.84E-16.93NL9	S bird	Coracoid	Passerine/Warbler-sized bird
94.84E-16.93NL9	L bird	long bone	b=4
94.84E-16.93NL9	Indian Peafowl	Femur	
94.84E-16.93NL9	bird	Carpometacarpus	
94.84E-16.93NL9	L bird	long bone	

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	CLASS	ORDER	FAMILY	GENUS	SPECIES	COMMON	END	FUSION	ELEMENT	SIDE	#	COMPI	grams
94.84E-16.93NL9	Aves					M bird	Proxim	Indeterminate	Sternum		1	Comple	1
94.84E-16.93NLwallclean	lm							Indeterminate	long bone		7	fragme	13
94.84E-16.93NLwallclean	lm							Indeterminate	rib/spine		8	fragme	7
94.84E-16.93NLwallclean	lm							Indeterminate	Mandible		1	fragme	4
94.84E-16.93NLwallclean	lm							Indeterminate	indeterminate		2	fragme	3
94.84E-16.93NLwallclean	mm						Shaft	Indeterminate	Scapula	Left	1	<1/4	8
94.84E-16.93NLwallclean	mm							Indeterminate	Skull		3	fragme	1
94.84E-16.93NLwallclean	mm							Indeterminate	indeterminate		6	fragme	3
94.84E-16.93NLwallclean	mm							Indeterminate	rib/spine		11	fragme	7
94.84E-16.93NLwallclean	mm						Arch	Indeterminate	Vert		2	<1/4	2
94.84E-16.93NLwallclean	mm							Indeterminate	long bone		10	fragme	11
94.84E-16.93NLwallclean	sm/bird					sm/bird		Indeterminate	long bone		11	fragme	3
94.84E-16.93NLwallclean	unident							Indeterminate	indeterminate			fragme	11
coding key:	**attributes key (in comments):**												
lm: large mammal	dev: developmental stage			w:worked									
mm:medium mammal	b:charred black			cut:# of cut marks visible									
sm: small mammal	pc:partially charred			hack: hacked through									
	c:calcined white/grey			pol: polished									
	sf: spiral fracture			saw: sawed through									
	rg: rodent gnawed			inc: incised									
	cg: carnivore gnawed			drill: drilled bone									

Appendix II. Faunal data from Kadebakele (weight in grams, dimensions in mm).

PROVENIENCE	COMMON	ELEMENT	comments
94.84E-16.93NL9	M bird	Sternum	
94.84E-16.93NLwallcleaning		long bone	
94.84E-16.93NLwallcleaning		rib/spine	
94.84E-16.93NLwallcleaning		Mandible	
94.84E-16.93NLwallcleaning		indeterminate	
94.84E-16.93NLwallcleaning		Scapula	
94.84E-16.93NLwallcleaning		Skull	
94.84E-16.93NLwallcleaning		indeterminate	
94.84E-16.93NLwallcleaning		rib/spine	b=3
94.84E-16.93NLwallcleaning		Vert	
94.84E-16.93NLwallcleaning		long bone	
94.84E-16.93NLwallclea	sm/bird	long bone	
94.84E-16.93NLwallcleaning		indeterminate	b=4

Appendix III. Metrical data from South Indian Large Bovids (given in mm). Data taken from both museum and archaeological specimens.

provenience	group	Tib Bp	Tib SD	Tib Bd	Astr GL1	Astr GLm	Astr D1	Astr Bd	Calc GB	Mcarp Bp	Mcarp SD	Mcarp Bd	Mcarp Bp
FMNH	*Bosephalus*	87.33	33.60	46.66	57.27	52.30	33.95	37.91	55.65	45.46	24.37	46.06	41.37
FMNH	*Bosephalus*	83.13	32.14	52.73					54.81	47.71	25.30	48.17	41.59
FMNH	*Bosephalus*												
FMNH	*Bosephalus*												
FMNH	*Bosephalus*												
FMNH	*Bosephalus*												
FMNH	*Bosephalus*												
FMNH	*Bos gaurus*	131.79	56.74	82.52	87.58	78.56	45.88	59.96	57.96	77.77	49.63	73.79	63.30
FMNH	*Bos gaurus*	131.60	55.07	81.19	87.35	78.75	46.38	59.81	59.68	78.16	51.09	74.34	65.98
FMNH	*Bos gaurus*												
FMNH	*Bos gaurus*												
FMNH	*Bos gaurus*												
FMNH	*Bos gaurus*												
FMNH	*Bos gaurus*												
FMNH	*Bos gaurus*												
FMNH	*Bos indicus*	112.53	43.30	67.06	79.17	72.46	39.67	50.40	65.83	65.99	37.34	65.41	53.48
FMNH	*Bos indicus*	111.72	43.79	67.73	78.35	72.40	41.70	47.99	67.40	66.24	36.87	65.64	53.06
FMNH	*Bos indicus*												
FMNH	*Bos indicus*												
FMNH	*Bos indicus*												
FMNH	*Bos indicus*												
FMNH	*Bos indicus*												
FMNH	*Bubalus*	111.21	47.78	75.44	74.03	70.69	46.45	49.61	67.62	71.40	42.15	75.35	57.20
FMNH	*Bubalus*	112.15	47.95	74.39	74.50	70.31	43.85	50.95	70.61	71.26	41.47	75.53	
FMNH	*Bubalus*												
FMNH	*Bubalus*												
FMNH	*Bubalus*												
FMNH	*Bubalus*												
FMNH	*Bubalus*												
FMNH	*Bubalus*												
Brahmagiri*	*Bos indicus*				67.00		37.00	39.00		56.00	26.00	51.00	
Brahmagiri*	*Bubalus*				82.00	76.00	46.00	52.00			39.00	70.00	
Kudatini**	*Bos indicus*				69.15	63.00	41.50						
VMS 110^	*Bos indicus*			58.48									
VMS 110^	*Bos indicus*												

Appendix III. Metrical data from South Indian Large Bovids (given in mm). Data taken from both museum and archaeological specimens.

provenience	*group*	Mtars SD	Mtars Bd	Phal1 Glpe	Phal1 Bp	Phal1 Bd	Phal2 GL	Phal2 Bp	Phal2 Bd	Phal3 DLS	Phal3 Ld	Phal3 Mbs
FMNH	*Bosephalus*	24.57	42.11	60.44		22.33	41.67	20.81		48.78	42.13	14.31
FMNH	*Bosephalus*	24.75	42.87	60.62	22.40	20.47	39.13	21.45	17.20	51.77	46.95	
FMNH	*Bosephalus*			60.57		21.99				57.90	50.02	14.90
FMNH	*Bosephalus*			62.20	21.70	21.18				56.66	50.02	14.90
FMNH	*Bosephalus*									56.66	44.74	15.24
FMNH	*Bosephalus*									56.49	48.18	14.77
FMNH	*Bosephalus*									58.28	46.64	13.55
FMNH	*Bos gaurus*	41.76	68.94	75.70	40.12	36.55	54.28	38.19	33.42	72.81	62.88	25.43
FMNH	*Bos gaurus*	42.86	66.26	75.10	40.52	35.21	55.26	35.51	28.70	84.84	65.62	27.02
FMNH	*Bos gaurus*			75.53	38.15	32.70	53.24	34.93	29.34	70.96	60.15	23.84
FMNH	*Bos gaurus*			75.98	37.05	34.10	53.68	37.55	33.92	74.98	64.58	25.18
FMNH	*Bos gaurus*			74.22	40.70	35.04	54.80	37.50	32.30			28.80
FMNH	*Bos gaurus*			73.76	39.38	36.27	56.70	35.05	27.80	73.21	61.50	25.19
FMNH	*Bos gaurus*			75.26	36.46	34.37	57.01	36.28	28.27	85.17	64.54	28.37
FMNH	*Bos gaurus*			77.29	37.30	32.13		38.75		86.05	64.17	28.82
FMNH	*Bos indicus*	32.55	62.22	68.21	31.80	28.02	46.10	31.79	24.52	79.91	61.10	24.46
FMNH	*Bos indicus*	32.32	60.88	65.70	34.91	30.05	44.25	32.97	27.81	76.70	58.50	26.20
FMNH	*Bos indicus*			69.28	33.07	28.73	43.95	30.99	27.29	70.10	57.50	22.05
FMNH	*Bos indicus*			67.00	33.06	28.98	44.15	31.87	28.73	68.83	54.11	21.80
FMNH	*Bos indicus*			66.37	34.98	29.04	44.62	32.97	26.22	76.25	59.84	24.90
FMNH	*Bos indicus*			65.64	33.87	29.78	43.00	31.15	26.43	69.10	53.60	23.48
FMNH	*Bos indicus*			68.04	31.69	28.90						
FMNH	*Bubalus*	32.17	68.40	68.85	36.81	35.77	50.55	38.44	29.75	72.82	58.49	23.61
FMNH	*Bubalus*			71.86	33.49	32.10	51.89	34.56	28.93	71.49	54.70	25.52
FMNH	*Bubalus*			68.48	37.13	34.61	52.97	35.72	29.26	76.82	58.15	24.22
FMNH	*Bubalus*			68.19	36.39	37.32	50.01	37.13	30.78	75.21	57.31	25.91
FMNH	*Bubalus*			71.21	34.19	32.95	51.01	34.92	28.37	76.48	61.08	22.59
FMNH	*Bubalus*			71.32	33.53	32.94	51.46	34.11	28.67	73.41	58.91	23.56
FMNH	*Bubalus*			71.44	35.28	34.27	48.86	36.39	29.69	77.35	57.70	25.73
FMNH	*Bubalus*			69.09	37.15	35.33	50.84	38.35	30.37	76.71	61.61	22.68
Brahmagiri*	*Bos indicus*											
Brahmagiri*	*Bubalus*											
Kudatini**	*Bos indicus*											
VMS 110^	*Bos indicus*					25.28	36.42	24.02	20.48			
VMS 110^	*Bos indicus*				25.35		38.22	29.78	24.86			

Appendix III. Metrical data from South Indian Large Bovids (given in mm). Data taken from both museum and archaeological specimens.

provenience	*group*	Tib Bp	Tib SD	Tib Bd	Astr GL1	Astr GLm	Astr D1	Astr Bd	Calc GB	Mcarp Bp	Mcarp SD	Mcarp Bd	Mcarp Bp
VMS 110^	*Bos indicus*												
VMS 110^	large bovid												
AF9L1	large bovid												
AF9L1	*Bos indicus*				71.94	66.93	39.79	51.23					
AF14L1	*Bubalus*				78.79	70.91	44.13						
AL11	*Bos indicus*												
AL5	*Bos indicus*				70.71	64.78	38.23	44.04					
AL5	large bovid												
AL11	*Bos indicus*												
BF4	large bovid				59.40	55.90	34.10	37.70					
BF5	*Bos indicus*												
BF10L1	*Bos indicus*												
BF12L1	large bovid												
BF12L1	*Bos indicus*								57.32				
BF13L1	*Bos indicus*												
BL2	*Bos indicus*												
BL2	*Bos indicus*												
BL2	*Bos indicus*												
BL2	*Bos indicus*							47.10					
BL3	large bovid				68.01	61.85		44.35					
BL3	large bovid												
BL6	large bovid				72.49								
BL7	*Bos indicus*					68.38							
BL7	large bovid												
BL8	large bovid												
BL8	*Bos indicus*					63.33	35.83	41.21					
BL8	*Bos indicus*												
BL9	*Bos indicus*								66.74				
BL9	large bovid												
BL9	*Bos indicus*												
BL10	large bovid												
BL11	large bovid												
BL11	large bovid												
BL14	large bovid												
BL15	large bovid												

Appendix III. Metrical data from South Indian Large Bovids (given in mm). Data taken from both museum and archaeological specimens.

provenience	*group*	Mtars SD	Mtars Bd	Phal1 Glpe	Phal1 Bp	Phal1 Bd	Phal2 GL	Phal2 Bp	Phal2 Bd	Phal3 DLS	Phal3 Ld	Phal3 Mbs
VMS 110^	*Bos indicus*						38.74	28.18	22.83			
VMS 110^	large bovid			71.54								
AF9L1	large bovid				29.97							
AF9L1	*Bos indicus*											
AF14L1	*Bubalus*											
AL11	*Bos indicus*									51.85	40.64	17.99
AL5	*Bos indicus*											
AL5	large bovid			70.53	26.91	26.80						
AL11	*Bos indicus*									51.85	40.64	17.99
BF4	large bovid											
BF5	*Bos indicus*						41.10	28.00	22.70			
BF10L1	*Bos indicus*											19.60
BF12L1	large bovid				25.71							
BF12L1	*Bos indicus*											
BF13L1	*Bos indicus*				27.78							
BL2	*Bos indicus*						41.50	25.80	22.50			
BL2	*Bos indicus*						43.30	25.90	21.10			
BL2	*Bos indicus*						43.40	27.80	25.00			
BL2	*Bos indicus*						42.40	25.10	22.20			
BL3	large bovid											
BL3	large bovid						45.25	31.03	26.20			
BL6	large bovid				28.76							
BL7	*Bos indicus*											
BL7	large bovid				28.59			26.20				
BL8	large bovid								26.59			
BL8	*Bos indicus*											
BL8	*Bos indicus*										47.96	
BL9	*Bos indicus*									60.49	51.01	22.58
BL9	large bovid				25.63							
BL9	*Bos indicus*									52.80	43.38	18.58
BL10	large bovid								14.74			
BL11	large bovid						39.54	27.92	24.46			
BL11	large bovid								31.14			
BL14	large bovid			71.10	33.20	28.40						
BL15	large bovid			72.80		30.80						

Appendix III. Metrical data from South Indian Large Bovids (given in mm). Data taken from both museum and archaeological specimens.

provenience	*group*	Tib Bp	Tib SD	Tib Bd	Astr GL1	Astr GLm	Astr D1	Astr Bd	Calc GB	Mcarp Bp	Mcarp SD	Mcarp Bd	Mcarp Bp
BL16	large bovid												
BL21	large bovid												
BL21	large bovid												
BL21	large bovid												
BL21	large bovid												
BL21	large bovid												
BL21	large bovid												
BL21	large bovid												
BL21	large bovid												
BL21	large bovid												
SSF1L1	*Bos indicus*												
SSF3L1	*Bos indicus*				27.92	26.46	14.75						
SSF3L1	*Bos indicus*												
SSF3L1	*Bos indicus*				65.18	61.48	33.45	40.20					
SSF3L1	large bovid												
SSF3L1	large bovid												42.18
SSF3L2	*Bos indicus*			66.08									
SSF2L1	*Bubalus*			60.23									
SSF3L3	*Bos indicus*												
SSF3L3	*Bos indicus*												
SSF3L3	large bovid											54.10	
SSF3L3	large bovid												
SSL2	*Bos indicus*												
SSL2	*Bos indicus*												
SSL3	*Bos indicus*												
SSL3	*Bos indicus*												
SSL4	*Bos indicus*												
SSL5	large bovid						23.70						
SSL8	large bovid				26.47	28.24	15.22						
SSL10	large bovid												
SSL11	*Bos indicus*												
SSL12	large bovid												
SSL15	*Bos indicus*												
SSL15	*Bos indicus*												
SSL16	*Bos indicus*											54.15	

Appendix III. Metrical data from South Indian Large Bovids (given in mm). Data taken from both museum and archaeological specimens.

provenience	*group*	Mtars SD	Mtars Bd	Phal1 Glpe	Phal1 Bp	Phal1 Bd	Phal2 GL	Phal2 Bp	Phal2 Bd	Phal3 DLS	Phal3 Ld	Phal3 Mbs
BL16	large bovid			66.80	25.10	24.80				49.90	43.50	
BL21	large bovid			69.10	30.90	28.70	48.60	31.70	26.40	63.90		25.20
BL21	large bovid			61.10	26.90	26.60	40.70	26.30	23.60	47.20	40.30	12.20
BL21	large bovid			63.40	26.30	25.70	41.80	27.90	24.60			
BL21	large bovid					24.40	40.70	26.50	24.30			
BL21	large bovid			61.20	27.60	26.00						
BL21	large bovid			77.50	32.20	30.50						
BL21	large bovid			66.40	22.20	21.60						
BL21	large bovid			58.20	26.90	25.40						
BL21	large bovid			60.10	25.80	23.60	37.40	25.40	24.20			
SSF1L1	*Bos indicus*						38.71	26.44	23.41	55.17	43.17	19.13
SSF3L1	*Bos indicus*				25.00							
SSF3L1	*Bos indicus*				21.41		39.42	27.33	25.21			
SSF3L1	*Bos indicus*			57.24	28.21	26.92						
SSF3L1	large bovid		46.85									
SSF3L1	large bovid											
SSF3L2	*Bos indicus*											
SSF2L1	*Bubalus*											
SSF3L3	*Bos indicus*				22.51							
SSF3L3	*Bos indicus*			58.91	27.72	26.04				78.08	60.11	28.88
SSF3L3	large bovid		54.10									
SSF3L3	large bovid									78.08	60.11	28.88
SSL2	*Bos indicus*						41.68	28.06	24.64	63.82		21.02
SSL2	*Bos indicus*											24.02
SSL3	*Bos indicus*				27.78							
SSL3	*Bos indicus*				28.79							
SSL4	*Bos indicus*			65.27	27.41	27.42						
SSL5	large bovid											
SSL8	large bovid									40.57	32.30	11.62
SSL10	large bovid								27.69			
SSL11	*Bos indicus*						39.94	26.75	22.08			
SSL12	large bovid								26.19			
SSL15	*Bos indicus*			59.04	27.00	25.71	38.82	25.75	23.31			
SSL15	*Bos indicus*			61.31			38.61	25.64	22.85			
SSL16	*Bos indicus*						39.15	25.29	23.13			

Appendix III. Metrical data from South Indian Large Bovids (given in mm). Data taken from both museum and archaeological specimens.

provenience	*group*	Tib Bp	Tib SD	Tib Bd	Astr GL1	Astr GLm	Astr D1	Astr Bd	Calc GB	Mcarp Bp	Mcarp SD	Mcarp Bd	Mcarp Bp
SSL17	*Bos indicus*				58.29	54.03	33.99	36.56					
SSL18	*Bos indicus*			59.45					60.15				
SSL18	*Bos indicus*			69.54									
SSL18	*Bos indicus*			58.44									
SSL18	large bovid					59.20		40.93				49.36	
SSL18	large bovid				72.87	67.44	40.37	47.22					
SSL18	large bovid					62.18	34.12	39.27					
SSL18	large bovid							37.51					
SSL18	large bovid												
SSL18	large bovid												
SSL19	*Bos indicus*												
SSL19	large bovid												
SSL19	*Bosephalus*												
SSL20	large bovid												
SSL20	*Bubalus*												
SSL20	large bovid												
SSL20	*Bos indicus*												
SSL21	*Bos indicus*				62.93	58.69	34.83	40.92					
SSL21	large bovid												
SSL23	large bovid												
SSL23	*Bubalus*				72.91	66.92	40.28						
SSL23	*Bos indicus*			60.98					63.99				
SSL23	*Bos indicus*												
SSL23	*Bubalus*				72.86	65.75	41.74						
EUTL16	*Bos indicus*				56.50	52.00	30.20	35.70					
EUTL17	*Bos indicus*												
EUTL21	large bovid												
EUTL22	large bovid												
EUTL24	large bovid												
EUTL26	large bovid				55.80	51.60	30.60	36.40					
EUTL26	large bovid				55.30	51.20	29.90	33.80					
NMF1	large bovid												
NML2	large bovid												
NML8	*Bos indicus*												
NML11	large bovid												

Appendix III. Metrical data from South Indian Large Bovids (given in mm). Data taken from both museum and archaeological specimens.

provenience	group	Mtars SD	Mtars Bd	Phal1 Glpe	Phal1 Bp	Phal1 Bd	Phal2 GL	Phal2 Bp	Phal2 Bd	Phal3 DLS	Phal3 Ld	Phal3 Mbs
SSL17	*Bos indicus*											
SSL18	*Bos indicus*											
SSL18	*Bos indicus*											
SSL18	*Bos indicus*											
SSL18	large bovid		52.55			21.27	45.29	31.78	29.34			
SSL18	large bovid			58.13	27.96	25.89	43.10	26.63	24.49			
SSL18	large bovid			61.86	32.25	24.90			26.13			
SSL18	large bovid						42.10	28.10	23.17			
SSL18	large bovid						46.81	29.91	26.98			
SSL18	large bovid						46.06	27.24	22.97			
SSL19	*Bos indicus*				29.70		42.77	30.52	25.53			
SSL19	large bovid							23.11				
SSL19	*Bosephalus*			66.87	19.45	19.76						
SSL20	large bovid		56.51	59.72	28.15	28.41	45.41		23.98	63.28	48.69	21.44
SSL20	*Bubalus*										63.01	32.07
SSL20	large bovid								21.87			
SSL20	*Bos indicus*			56.74	26.50	23.73	37.11	24.93	22.39			
SSL21	*Bos indicus*											
SSL21	large bovid						41.14		20.75			
SSL23	large bovid						40.43	24.45	23.15			
SSL23	*Bubalus*											
SSL23	*Bos indicus*			52.64	25.35	24.74						
SSL23	*Bos indicus*				25.64							
SSL23	*Bubalus*											
EUTL16	*Bos indicus*											
EUTL17	*Bos indicus*			61.80	28.20	27.20						
EUTL21	large bovid					28.60	45.00	29.10	28.60	67.20	51.80	21.50
EUTL22	large bovid						40.80	28.10	24.00			
EUTL24	large bovid			65.40	25.40	24.20				65.00	51.30	21.80
EUTL26	large bovid					20.50						
EUTL26	large bovid											
NMF1	large bovid									63.30	49.00	23.80
NML2	large bovid						36.50	26.30	23.80			
NML8	*Bos indicus*						46.20	30.50	26.10			
NML11	large bovid						42.90	27.60	21.60			

Appendix III. Metrical data from South Indian Large Bovids (given in mm). Data taken from both museum and archaeological specimens.

provenience	*group*	Tib Bp	Tib SD	Tib Bd	Astr GL1	Astr GLm	Astr D1	Astr Bd	Calc GB	Mcarp Bp	Mcarp SD	Mcarp Bd	Mcarp Bp
NML14	large bovid												
NML15	large bovid												
NML17	large bovid												
NML20	large bovid												
* published in Nath 1968													
** published in Joglekar 1998-9													
^ published in Monahan in press													
provenience key:													
FMNH: Field Museum of Natural History modern specimen (Bosephalus: adult, female; B. gaurus: no information; B. indicus: 15 yo., female; Bubalus: subadult, male)													
A: Kadebakele Block A													
B: Kadebakele Block B													
SS: Kadebakele Southern Slope													
EUT: Kadebakele Eastern Upper Terrace													
NM: Kadebakele North Midden													
L: level #													
F: feature #													

Appendix III. Metrical data from South Indian Large Bovids (given in mm). Data taken from both museum and archaeological specimens.

provenience	*group*	Mtars SD	Mtars Bd	Phal1 Glpe	Phal1 Bp	Phal1 Bd	Phal2 GL	Phal2 Bp	Phal2 Bd	Phal3 DLS	Phal3 Ld	Phal3 Mbs
NML14	large bovid			69.00	31.20	27.60						
NML15	large bovid									62.90	48.70	21.40
NML17	large bovid						43.80	28.80	26.00			
NML20	large bovid									56.20	45.60	16.10

Appendix IV. Metrical Data taken from Museum Specimens of South Indian Bird species (given in mm).

species		catalog ID^	common	Sex	Coracoid	Coracoid	Coracoid	Coracoid	Humerus	Humerus	Humerus	Ulna	Ulna
					GL	Lm	Bb	BF	GL	Sc	Bd	GL	Did
Anser	*indicus*		Bar-Headed Goose	F	66.37	59.07	24.16	24.15	*	8.90	22.06	*	13.28
					66.58	59.62	24.28	24.13	*	8.49	22.16	*	13.71
Anser	*indicus*	217927	Bar-Headed Goose	M	63.18	55.10	26.31	23.82	145.79	8.83	21.62	138.39	13.65
					63.21	55.09	25.99	23.80	145.14	8.58	21.61	137.42	14.25
Anas	*acuta*		Northern Pintail	F	47.87	43.65	20.02	17.65	85.54	6.47	14.02	75.60	*
					*	*	*	*	85.09	6.63	13.60	*	*
Anas	*crecca*		Common Teal	M	35.99	*	15.14	12.49	57.18	4.15	9.23	49.39	6.69
					35.58	*	*	*	57.17	3.98	9.41	49.60	6.50
Anas	*poecilorhyncha*		Spot-Billed Duck	?	57.82	52.85	24.35	19.54	99.05	6.63	14.69	84.32	10.41
					57.10	52.88	24.64	20.20	99.35	7.01	14.32	83.83	9.70
Anas	*poecilorhyncha*	234962	Spot-Billed Duck	F	50.92	46.54	22.86	20.56	91.00	6.54	14.53	79.26	10.22
					51.24	46.72	22.60	20.43	61.65	6.21	14.55	missing	missing
Anastomus	*oscitans*	216573	Asian Openbill	F	58.73	53.01	21.78	18.06	130.41	9.34	20.18	>150 mm	12.02
					58.15	52.55	22.49	19.03	129.95	9.40	20.31	>150 mm	12.10
Anhinga	*sp.*	220883	Darter	M	54.93	50.13	20.16	13.32	123.08	6.45	15.32	110.45	10.72
					55.01	49.86	20.23	13.82	123.73	6.40	15.95	109.94	10.60
Aread	*alba*		Great Egret	F	52.67	49.00	19.44	16.39	135.01	6.94	16.53	>150 mm	8.79
(Casmerodius albus)					52.57	49.27	broken	15.09	134.73	6.96	16.59	>150 mm	8.96
Ardea	*alba*	205296	Great Egret	M	55.23	51.64	21.36	16.73	143.21	8.05	18.23	>150 mm	10.67
(Casmerodius albus)					55.88	52.59	20.90	16.16	broken	7.92	17.58	broken	broken
Ardea	*cinerea*		Grey Heron	M	67.36	61.76	27.87	21.54	>150 mm	11.06	23.33	>150 mm	12.29
					missing	missing	missing	missing	>150 mm	10.92	24.06	>150 mm	12.04
Ardea	*cinerea*	205694	Grey Heron	M	67.01	61.64	27.89	20.68	>150 mm	10.74	23.39	>150 mm	12.68
					67.21	62.64	27.54	20.06	>150 mm	10.56	23.71	>150 mm	13.03
Ardea	*purpurea*	154434	Purple Heron	M	60.86	57.63	23.89	17.48	139.62	8.69	17.78	>150 mm	10.11
					missing	missing	missing	missing	broken	8.67	18.19	>150 mm	10.07
Ardeola	*striatus*	158162	Little Heron	M	35.63	34.93	11.96	8.70	66.96	3.84	9.11	73.18	5.40
(Butorides striata)					35.80	34.74	12.36	9.14	66.99	3.81	9.47	72.86	5.41
Bubulcus	*ibis*		Cattle Egret	M	42.44	39.32	15.55	13.01	91.55	5.42	12.10	105.33	7.16
(Egretta ibis)					42.27	39.24	15.97	13.16	91.89	5.58	12.06	104.17	6.87
Bubulcus	*ibis*	205699	Cattle Egret	M	42.56	40.61	15.51	12.55	92.94	5.74	12.64	108.13	6.68
(Egretta ibis)					42.91	40.83	15.28	12.15	93.03	5.76	12.89	107.92	6.84

Appendix IV. Metrical Data taken from Museum Specimens of South Indian Bird species (given in mm).

common	Carpometacarups		Phal1	Femur	Femur	Femur	Tibiotarusus		Tibiotarusus		Tarsometatarsus		Tarsometatarsus	
	GL	Bp	L	GL	Lm	Bd	GL	Dip	Bd	Dd	GL	Bp	Sc	Bd
Bar-Headed Goose	86.71	18.18	38.06	71.50	68.69	16.91	*	18.96	12.94	13.04	79.04	13.93	5.83	14.39
	broken	18.68	missing	71.90	68.48	16.75	*	19.02	12.83	13.06	78.70	13.99	5.73	14.10
Bar-Headed Goose	80.74	19.38	32.60	70.11	65.37	17.83	123.41	20.63	14.40	13.93	75.83	14.97	6.03	16.56
	broken	broken	missing	70.05	65.66	17.90	122.83	20.90	14.88	13.54	76.16	15.16	5.72	16.33
Northern Pintail	51.57	16.16	21.28	42.74	41.50	9.61	75.95	11.69	8.08	8.14	38.86	8.44	3.70	8.84
	*	*	missing	43.21	41.30	9.90	*	11.83	7.86	*	39.75	8.85	3.54	9.08
Common Teal	34.14	8.48	13.41	32.39	29.82	7.34	55.30	8.29	6.17	6.47	30.25	6.32	2.74	6.29
	34.53	8.33	13.18	32.47	30.12	7.29	55.44	8.60	6.16	6.27	30.25	6.34	2.78	6.56
Spot-Billed Duck	60.40	13.23	22.97	54.41	52.41	11.34	90.14	14.45	9.47	10.02	49.23	9.42	4.66	8.87
	broken	12.90	*	54.50	52.59	11.36	90.05	14.66	8.70	10.02	49.42	9.42	4.69	9.78
Spot-Billed Duck	55.93	13.08	21.74	49.91	47.41	11.28	82.42	13.51	8.53	8.78	42.72	9.05	4.00	9.89
	missing	missing	missing	49.63	47.02	11.34	missing	missing	missing	missing	missing	missing	missing	missing
Asian Openbill	74.36	16.34	31.61	72.42	68.34	16.37	>150 mm	19.22	11.49	12.24	144.24	13.86	5.69	14.86
	73.78	16.91	30.73	72.29	68.39	16.36	>150 mm	18.70	11.46	11.93	broken	13.97	5.72	14.71
Darter	62.72	13.11	25.68	55.54	55.27	12.27	87.30	13.94	11.13	8.60	39.38	11.61	5.92	14.43
	62.80	13.36	25.86	54.96	54.43	11.75	87.84	13.80	10.56	8.61	39.39	11.16	6.09	14.39
Great Egret	72.89	12.29	26.43	72.79	71.89	12.09	>150 mm	15.58	9.83	*	unfused	19.33	5.10	12.41
	72.43	12.27	26.54	72.47	70.73	12.11	>150 mm	15.56	10.22	*	unfused	broken	5.04	12.57
Great Egret	74.43	13.39	27.36	75.88	74.31	13.64	>150 mm	15.81	10.99	11.03	147.88	13.12	5.27	12.83
	broken	13.38	26.89	75.84	74.31	13.33	>150 mm	15.66	10.82	11.00	147.56	12.58	5.28	12.52
Grey Heron	93.95	16.47	34.37	93.21	91.48	16.00	>150 mm	20.14	14.09	14.83	>150 mm	15.64	6.16	15.01
	94.01	16.39	34.59	94.14	91.93	15.80	>150 mm	20.26	14.57	14.47	>150 mm	15.42	6.35	14.67
Grey Heron	93.97	16.66	33.64	95.79	93.48	16.17	>150 mm	19.82	12.80	14.39	>150 mm	14.47	5.43	14.87
	93.50	16.84	33.66	95.38	92.86	15.84	>150 mm	20.08	12.48	14.32	>150 mm	14.60	5.73	14.96
Purple Heron	76.65	14.03	27.61	90.02	87.29	13.87	>150 mm	17.06	11.39	11.94	121.81	12.86	5.66	12.93
	76.73	14.07	27.44	90.09	87.23	13.35	>150 mm	17.15	11.71	11.88	121.73	12.35	5.65	12.91
Little Heron	36.52	7.12	12.94	49.34	48.36	7.09	75.63	9.10	6.41	5.99	48.68	7.08	2.90	6.51
	36.60	7.22	12.50	49.21	48.07	6.96	74.80	8.71	6.34	5.81	48.84	7.10	3.04	6.39
Cattle Egret	48.11	9.01	17.28	53.86	52.39	8.91	114.81	10.77	7.55	7.66	79.77	8.36	3.53	8.95
	48.72	9.12	17.02	53.56	52.33	8.83	115.07	10.89	7.59	7.70	79.55	8.39	3.59	9.38
Cattle Egret	48.62	9.71	19.14	54.68	52.83	9.06	115.14	10.87	8.05	7.43	80.88	8.72	4.09	9.07
	48.47	9.32	18.93	54.64	53.00	8.80	115.34	11.27	7.78	7.42	80.99	8.72	3.95	8.96

Appendix IV. Metrical Data taken from Museum Specimens of South Indian Bird species (given in mm).

species		catalog ID^	common		Sex	Coracoid	Coracoid	Coracoid	Coracoid	Humerus	Humerus	Humerus	Ulna	Ulna
						GL	Lm	Bb	BF	GL	Sc	Bd	GL	Did
Burhinus	*oedicnemus*	220229	Eurasian Thick-Knee		M	35.10	31.17	15.93	13.79	78.33	4.64	11.93	86.07	8.16
						35.01	31.71	15.87	12.76	78.63	4.66	11.57	broken	broken
Butorides	*striatus*		Little Heron		F	36.57	35.44	13.22	9.62	70.34	3.83	9.83	78.30	5.67
(Ardeola striata)						36.19	35.31	13.19	9.67	70.21	3.97	9.69	78.56	5.65
Chalcophaps	*indica*		Emerald Dove		F	25.92	25.21	9.60	5.93	32.66	3.74	7.66	37.75	4.46
						25.84	25.26	9.49	5.67	32.60	3.43	7.96	40.25	*
Chalcophaps	*indica*	228019	Emerald Dove		M	26.81	25.78	9.88	5.74	32.74	3.66	7.97	39.61	4.75
						missing	missing	missing	missing	broken	broken	7.90	39.74	4.80
Chlidonias	*hybridus*	207023	Whiskered Tern		F	21.32	20.35	9.14	6.70	48.49	3.01	6.85	58.27	5.25
(Sterna hybrida)						21.38	20.60	broken	6.60	48.88	2.95	6.63	58.42	5.27
Ciconia	*episcopus*		Wooly-Necked Stork		F	67.81	60.48	27.85	22.44	>150 mm	12.10	25.71	>150 mm	14.12
						67.79	59.47	28.28	23.63	>150 mm	11.56	25.60	>150 mm	13.59
Dendrocygna	*javanica*	152660	Lesser Whistling Duck		F	40.19	36.79	16.08	13.08	82.87	5.01	11.08	86.90	7.35
						40.34	37.37	15.84	12.77	82.73	4.80	11.45	87.02	7.22
Egretta	*garzetta*	206549	Little Egret		M	46.06	42.58	18.34	14.96	104.22	6.47	14.47	123.81	7.61
						45.64	41.69	18.61	14.93	broken	6.57	14.17	broken	7.78
Francolinus	*pondicerianus*	208291	Grey Francolin		F	29.21	27.88	8.11	5.74	39.68	3.30	8.26	36.93	5.23
						28.88	27.65	8.10	5.67	40.07	3.29	8.07	36.97	5.10
Gallinago	*gallinago*		Common Snipe		M	19.90	16.93	8.47	5.55	38.32	2.72	6.49	40.73	4.17
						*	*	*	*	38.28	2.70	6.70	*	*
Hydrophasianu	*chirurgus*	210714	Pheasant-Tailed Jacana		F	22.56	21.05	8.67	7.42	48.99	3.35	8.44	55.04	6.65
						22.46	20.97	10.40	7.44	48.92	3.44	7.73	55.43	6.33
Metopidius	*indicus*	219845	Bronze-Winged Jacana		F	28.07	25.79	9.06	7.44	55.13	3.80	9.30	59.87	7.20
						27.95	25.86	10.44	7.48	55.15	3.77	9.25	59.87	6.63
Mycteria	*leucocephala*	154507	Painted Stork		?	71.51	64.39	25.61	20.03	>150 mm	11.69	26.46	>150	12.84
						71.06	64.93	24.79	18.76	>150 mm	11.87	26.30	>150	13.30
Mycteria	*leucocephala*		Painted Stork		?	70.71	63.95	26.96	19.73	>150 mm	11.31	26.05	>150 mm	13.26
						70.63	62.91	27.75	21.61	>150 mm	11.36	25.57	>150 mm	broken
Nettapus	*coromandeliar*	223660	Cotton Pygmy-Goose		M	broken	broken	broken	broken	51.91	3.89	8.31	44.86	5.81
						31.13	27.89	12.45	12.49	52.69	3.92	8.47	44.51	5.86
Nycticorax	*nycticorax*		Black-Crowned Night Heron		?	59.07	56.96	23.03	17.73	117.56	6.85	16.62	133.02	9.39
						58.82	56.89	22.65	17.50	117.65	6.83	16.39	133.16	9.21

Appendix IV. Metrical Data taken from Museum Specimens of South Indian Bird species (given in mm).

common	Carpometacarups		Phal1	Femur	Femur	Femur	Tibiotarusus		Tibiotarusus		Tarsometatarsus		Tarsometatarsus	
	GL	Bp	L	GL	Lm	Bd	GL	Dip	Bd	Dd	GL	Bp	Sc	Bd
Eurasian Thick-Knee	39.25	11.67	19.08	48.75	45.29	10.55	broken	13.03	7.72	7.89	73.85	8.86	3.30	8.35
	39.42	11.73	19.08	48.40	45.54	10.54	94.19	13.15	7.23	7.84	74.46	9.10	3.25	8.32
Little Heron	37.65	7.59	13.17	50.53	49.45	7.17	82.02	9.21	6.67	6.28	50.40	6.86	3.24	8.95
	38.17	7.35	13.11	50.62	49.53	7.23	81.69	8.74	6.61	5.98	51.66	6.69	3.59	9.38
Emerald Dove	21.88	6.82	9.00	29.95	28.16	5.01	43.97	6.21	3.99	4.33	27.53	4.57	2.35	5.00
	22.24	6.78	9.35	30.03	27.06	5.02	44.04	*	4.14	4.29	27.00	4.94	2.18	*
Emerald Dove	22.64	6.75	10.12	30.39	29.15	4.87	45.02	6.07	4.41	4.36	25.79	5.06	2.24	5.14
	22.67	6.35	9.34	30.50	28.98	4.98	44.71	5.88	4.37	4.32	25.76	5.10	2.01	5.45
Whiskered Tern	31.38	6.89	15.93	22.04	21.33	4.02	41.47	4.70	3.52	3.54	23.44	3.81	1.61	4.20
	31.44	7.19	15.84	22.38	21.45	4.12	41.13	4.72	3.48	3.58	missing	missing	missing	missing
Wooly-Necked Stork	91.90	20.15	36.14	74.07	69.62	18.53	>150 mm	21.36	12.11	14.72	>150 mm	14.74	6.70	16.64
	broken	19.76	missing	74.06	69.53	18.72	>150 mm	22.04	12.33	14.62	>150 mm	14.92	7.01	16.55
Lesser Whistling Duck	45.16	9.18	17.53	43.86	41.90	9.34	78.96	11.88	8.26	8.28	46.49	8.87	4.25	9.11
	45.19	9.29	17.59	43.78	41.85	9.39	78.61	11.93	8.18	8.48	46.37	8.91	4.15	9.00
Little Egret	58.82	11.03	21.22	59.11	56.51	10.90	144.46	13.80	8.93	9.16	108.46	9.55	4.12	10.17
	58.88	10.63	21.44	58.56	56.43	10.60	broken	13.54	8.87	9.07	107.85	9.58	4.30	9.91
Grey Francolin	21.59	6.14	8.71	42.74	40.42	7.53	59.76	10.17	5.96	5.56	38.15	6.45	3.23	6.44
	21.59	5.91	8.31	42.70	40.41	7.41	60.04	10.17	6.00	5.67	38.08	6.44	3.07	6.63
Common Snipe	25.55	5.93	9.59	32.25	30.86	5.27	54.41	6.66	4.28	4.25	31.85	5.15	2.08	4.69
	25.27	5.82	*	32.38	30.56	5.04	54.00	6.71	4.43	4.20	32.31	5.18	2.10	4.94
Pheasant-Tailed Jacana	30.27	6.98	12.74	29.93	28.58	6.10	76.45	8.15	5.56	5.61	54.54	6.05	2.86	6.95
	30.39	7.43	12.51	30.30	28.73	5.96	76.28	7.71	5.59	5.54	53.89	5.87	2.87	6.64
Bronze-Winged Jacana	36.60	8.71	15.19	41.73	39.01	8.44	108.22	10.11	6.88	7.40	77.78	7.68	2.90	9.09
	36.51	8.47	15.15	41.21	39.28	8.29	108.91	10.00	6.87	7.27	77.88	7.57	3.02	8.95
Painted Stork	*	18.90	missing	92.87	86.94	19.75	>150	23.20	12.23	16.61	>150 mm	16.39	6.69	18.72
	broken	broken	missing	93.18	87.26	20.09	>150	23.11	12.30	16.69	>150 mm	15.51	6.73	18.51
Painted Stork	88.87	19.30	38.05	90.73	84.94	19.72	>150 mm	22.66	12.65	14.92	>150 mm	16.11	6.77	17.99
	88.71	19.18	38.57	90.22	84.27	19.55	>150 mm	22.70	13.05	16.97	>150 mm	15.72	6.50	17.64
Cotton Pygmy-Goose	29.09	9.06	12.24	28.04	27.48	6.27	46.70	6.79	4.91	5.31	23.13	5.08	2.42	5.21
	29.33	9.09	12.18	28.01	27.29	6.11	46.92	6.85	4.87	5.34	23.25	5.09	2.37	4.60
Black-Crowned Night Heron	66.49	12.07	23.40	77.24	75.45	13.50	131.27	15.61	11.00	10.78	87.14	12.34	4.64	10.93
	66.53	12.36	23.41	77.50	75.95	12.95	130.96	16.26	10.96	10.50	87.06	12.69	4.24	11.01

Appendix IV. Metrical Data taken from Museum Specimens of South Indian Bird species (given in mm).

species		catalog ID^	common	Sex	Coracoid	Coracoid	Coracoid	Coracoid	Humerus	Humerus	Humerus	Ulna	Ulna
					GL	Lm	Bb	BF	GL	Sc	Bd	GL	Did
Nycticorax	*nycticorax*	73670	Black-Crowned Night Heron	M	55.86	52.97	23.45	17.74	115.64	6.92	15.43	128.34	9.35
					56.37	53.04	21.96	16.89	broken	broken	15.95	127.00	9.22
Pavo	*cristatus*		Indian Peafowl	F	71.35	68.66	19.24	14.36	116.49	10.30	23.10	107.68	13.88
					71.97	67.99	18.36	14.42	116.18	10.46	23.04	107.55	13.95
Phalacrocorax	*carbo*	206126	Great Cormorant	M	76.94	70.33	26.24	22.22	>150 mm	9.30	17.68	>150 mm	11.50
					76.37	69.27	29.46	23.48	>150 mm	8.85	18.32	>150 mm	11.91
Phalacrocorax	*niger*	211560	Little Cormorant	F	43.52	40.04	15.86	13.47	86.00	4.58	9.43	89.89	6.93
					43.35	39.66	16.31	12.97	85.98	4.71	9.54	broken	broken
Platalea	*leucorodia*	205714	Eurasian Spoonbill	F	58.37	52.14	28.21	21.36	142.24	9.92	22.31	>150 mm	12.37
					59.39	52.42	27.49	20.74	141.87	9.77	21.73	>150 mm	12.59
Platalea	*leucorodia*		Eurasian Spoonbill	M	57.62	51.87	28.18	21.88	137.11	9.65	22.12	>150 mm	12.20
					57.86	52.27	26.43	19.59	136.83	9.50	21.95	>150 mm	12.05
Pseudibis	*papillosa*		Black Ibis	?	51.43	46.17	23.01	19.51	118.97	9.40	21.45	134.25	11.53
					50.98	45.58	23.64	20.14	118.85	9.01	20.31	133.86	11.08
Streptopelia	*chinensis*		Spotted Dove	?	27.71	26.59	11.64	7.81	35.42	3.95	8.70	40.43	4.98
					27.79	26.67	9.59	7.79	35.65	3.95	8.66	40.45	4.90
Streptopelia	*chinensis*	219867	Spotted Dove	M	28.05	26.80	10.16	7.01	35.26	3.79	8.19	40.22	5.05
					27.91	26.47	10.40	7.16	35.26	3.86	8.66	40.14	4.93
Streptopelia	*decacoto*		Eurasian Collared Dove	M	29.48	27.84	12.16	8.13	37.21	4.38	9.47	43.08	5.88
					*	*	*	*	37.39	4.22	9.25	42.66	6.02
Streptopelia	*decacoto*	220243	Eurasian Collared Dove	F	25.33	24.13	7.82	6.40	32.03	3.54	7.66	37.66	4.81
					25.38	24.03	*	6.53	32.16	3.55	7.70	37.52	4.79
Streptopelia	*senegalensis*	227839	Laughing Dove	M	25.98	25.20	10.34	6.21	32.28	3.64	8.28	37.33	4.71
					25.93	25.17	10.52	6.51	32.25	3.55	7.82	37.24	4.70
Streptopelia	*senegalensis*		Laughing Dove	M	23.33	22.51	8.89	5.78	29.85	3.44	7.08	34.38	4.09
					23.55	22.41	8.82	5.48	29.83	3.38	7.07	broken	4.40
Tachybaptus	*ruficollis*	206769	Little Grebe	M	23.57	22.90	7.86	7.86	(coracoid only)				
					24.09	23.06	8.10	8.10					
Tachybaptus	*ruficollis*	207657	Little Grebe	F					48.76	2.50	5.22	44.73	4.11
									49.04	2.45	5.20	missing	missing
Tachybaptus	*ruficollis*		Little Grebe	F	21.76	21.14	7.97	7.39	53.36	2.54	5.60	49.89	3.10
					22.02	21.28	7.93	7.30	53.51	2.54	5.68	*	3.16

Appendix IV. Metrical Data taken from Museum Specimens of South Indian Bird species (given in mm).

common	Carpometacarups		Phal1	Femur	Femur	Femur	Tibiotarusus		Tibiotarusus		Tarsometatarsus	Tarsometatarsus	Tarsometatarsus	
	GL	Bp	L	GL	Lm	Bd	GL	Dip	Bd	Dd	GL	Bp	Sc	Bd
Black-Crowned Night Heron	64.90	11.80	23.83	74.62	72.95	11.92	129.75	14.58	10.52	9.68	83.56	12.08	4.94	12.22
	64.96	11.68	23.56	75.06	73.23	12.34	broken	broken	10.55	9.81	83.98	11.96	5.42	11.57
Indian Peafowl	59.55	16.40	20.57	102.62	95.13	21.16	*	25.64	14.70	15.10	110.47	17.60	7.26	17.81
	59.41	15.80	20.25	103.00	95.36	21.25	*	25.70	14.73	15.30	111.06	17.27	7.62	17.46
Great Cormorant	76.90	15.18	31.97	57.50	55.96	16.06	109.73	17.65	13.24	10.36	62.70	13.37	6.68	14.85
	77.07	15.47	31.63	57.72	56.03	16.39	109.97	17.83	13.66	11.17	62.87	14.40	6.16	14.65
Little Cormorant	41.29	8.59	16.79	33.55	33.28	8.93	58.00	10.00	7.07	6.06	33.03	7.32	4.06	9.23
	41.39	8.58	17.30	34.21	33.40	8.68	broken	10.11	6.99	6.28	33.21	7.54	3.95	9.72
Eurasian Spoonbill	78.64	16.13	33.14	80.38	76.46	17.13	>150 mm	20.09	12.53	13.71	141.08	15.13	5.35	15.26
	79.54	16.04	34.19	80.92	77.24	16.78	>150 mm	20.47	12.46	14.33	142.38	15.32	5.40	15.40
Eurasian Spoonbill	73.40	15.79	31.58	80.68	75.67	17.35	>150 mm	21.47	13.33	14.55	133.38	15.94	6.18	16.55
	74.04	15.24	32.08	79.96	75.48	17.09	>150 mm	20.74	13.61	14.77	broken	15.93	6.21	16.55
Black Ibis	70.33	14.77	29.17	61.13	57.39	14.60	112.55	17.50	11.41	11.30	75.48	13.63	4.69	13.44
	70.59	14.24	31.46	61.46	57.27	14.47	111.61	16.48	11.95	11.63	75.51	13.77	4.81	13.61
Spotted Dove	25.09	6.90	10.81	32.58	30.02	5.47	44.00	6.71	4.87	4.63	25.75	5.58	2.45	5.44
	24.95	6.84	10.78	32.44	30.65	5.75	broken	6.83	4.80	4.63	25.70	5.57	3.36	5.35
Spotted Dove	24.26	6.47	10.20	31.89	30.26	5.41	43.59	6.39	4.63	4.88	24.42	5.10	2.34	5.45
	24.30	6.58	9.87	31.72	30.09	5.45	43.50	6.44	4.55	4.64	24.76	5.28	2.25	5.29
Eurasian Collared Dove	26.77	8.32	11.27	31.70	29.14	5.72	43.06	7.04	5.05	5.30	23.63	5.93	2.81	6.36
	27.03	8.08	11.60	31.42	29.43	5.61	*	6.91	5.09	*	23.94	5.79	2.51	6.00
Eurasian Collared Dove	broken	6.81	11.60	27.87	26.26	4.69	broken	5.64	missing	missing	20.68	4.75	2.18	5.24
	broken	broken	11.47	27.83	26.21	4.80	broken	5.81	missing	missing	20.64	4.78	2.27	5.01
Laughing Dove	22.40	6.17	9.75	29.33	27.79	5.04	38.55	5.96	4.26	4.20	22.33	4.81	2.22	5.50
	22.37	6.33	missing	29.14	27.64	4.95	38.49	6.03	4.26	4.20	22.21	4.78	2.04	5.53
Laughing Dove	21.42	6.04	9.17	27.76	26.30	4.83	35.34	5.53	4.03	3.83	20.43	4.35	1.89	4.50
	21.32	5.94	9.13	27.74	26.22	4.77	35.13	5.64	4.21	3.79	20.40	4.43	1.92	4.81
Little Grebe														
Little Grebe	22.89	4.72	10.13	27.78	26.19	6.90	60.80	5.17	4.99	4.95	33.18	5.67	2.28	4.34
	missing	missing	missing	27.52	26.21	6.92	60.24	5.96	5.17	5.00	missing	missing	missing	missing
Little Grebe	24.77	4.86	missing	missing	missing	6.97	62.72	5.12	5.92	5.30	34.34	5.98	2.46	5.37
	24.60	4.84	missing	missing	missing	*	62.76	5.03	5.65	5.23	34.41	5.90	3.36	4.88

Appendix IV. Metrical Data taken from Museum Specimens of South Indian Bird species (given in mm).

species		catalog ID^	common		Sex	Coracoid	Coracoid	Coracoid	Coracoid	Humerus	Humerus	Humerus	Ulna	Ulna
						GL	Lm	Bb	BF	GL	Sc	Bd	GL	Did
Threskiornis	*sp.*		Black-Headed Ibis		F	53.48	48.33	24.43	19.48	123.39	8.56	19.89	140.22	11.26
						53.56	47.53	25.29	20.68	123.03	8.56	20.01	broken	10.59
Threskiornis	*sp.*	205488	Black-Headed Ibis		M	60.65	54.82	27.79	22.12	130.16	10.57	23.10	151.74	12.84
						60.91	54.87	28.18	22.01	129.88	10.11	22.68	151.70	12.37
Tringa	*glareola*	206806	Wood Sandpiper		M	16.81	15.81	7.86	5.08	broken	broken	broken	36.12	3.73
						16.93	15.78	7.57	4.89	missing	missing	missing	36.10	3.63
Tringa	*nebularia*	206805	Common Greenshank		F	24.30	23.10	10.91	6.76	50.46	3.57	8.22	53.14	5.93
						23.95	23.14	10.93	6.64	50.41	3.51	7.85	53.46	5.89
Tringa	*totanus*	220241	Common Redshank		?	21.80	20.25	10.55	6.47	44.07	2.90	7.22	47.20	5.10
						21.81	20.26	10.24	6.59	44.05	3.06	7.19	47.43	5.17
Turnix	*suscitator*	205093	Common Buttonquail		F	22.20	21.73	7.96	3.52	30.20	2.26	5.02	28.68	2.98
						missing	missing	missing	missing	30.27	2.24	5.21	28.65	2.98

**indicates measurement not taken on skeletons not fully disarticulated, impeding accuracy of measurement*

^ this number appears for specimens housed at University of Michigan Museum of Zoology

Appendix IV. Metrical Data taken from Museum Specimens of South Indian Bird species (given in mm).

common	Carpometacarups		Phal1	Femur	Femur	Femur	Tibiotarusus		Tibiotarusus		Tarsometatarsus		Tarsometatarsus	
	GL	Bp	L	GL	Lm	Bd	GL	Dip	Bd	Dd	GL	Bp	Sc	Bd
Black-Headed Ibis	67.51	15.15	29.78	71.40	68.17	15.41	141.38	18.24	12.80	11.71	95.19	14.94	5.79	14.23
	missing	missing	missing	71.56	68.39	15.26	140.86	18.24	12.81	12.02	94.88	14.32	5.86	13.84
Black-Headed Ibis	75.87	16.70	32.10	79.37	75.88	18.19	>150	20.17	14.73	13.87	105.93	16.45	6.46	17.10
	75.30	16.12	32.00	78.48	75.71	17.55	>150	21.00	14.69	14.43	105.02	16.69	5.90	16.96
Wood Sandpiper	21.48	5.26	9.68	24.70	23.08	4.39	52.42	5.42	3.27	3.47	40.24	3.76	1.50	3.48
	21.60	5.34	9.39	24.80	22.94	4.19	52.61	5.50	3.39	3.48	40.23	3.78	1.48	3.44
Common Greenshank	31.19	7.75	14.29	35.26	33.10	6.85	78.19	8.70	4.84	5.44	59.24	5.59	2.04	5.07
	31.29	7.88	14.37	35.23	32.63	6.66	78.38	9.07	4.89	5.58	59.14	5.50	2.00	4.85
Common Redshank	28.72	6.94	11.91	30.81	28.88	6.12	broken	7.79	4.38	4.90	50.73	5.08	1.59	4.54
	broken	6.72	11.77	30.66	29.06	6.05	missing	missing	missing	missing	50.77	5.16	1.75	4.60
Common Buttonquail	17.17	3.97	5.53	31.31	29.42	4.86	39.92	6.18	3.72	3.76	25.62	3.65	1.91	4.23
	17.13	3.95	5.44	31.18	29.28	5.00	39.96	6.07	3.71	3.64	25.31	4.10	1.90	4.28

**indicates measurement not taken on skeletons not fully disarticulated, impeding accuracy of measurement*

^ this number appears for specimens housed at University of Michigan Museum of Zoology

Appendix V. Metrical Data from Museum Specimens of South Indian Turtle species (given in mm).

species			Humerus	Humerus	Femur	Femur	Coracoid	Scapula	Ilium
			GL	Prox Width**	GL	Prox Br*	GL	GL	GL^
Geochelone	*elegans*		29.8	8.97	24.49	6.57	13.31	32.31	24.44
			29.93	9.57	24.4	6.87	13.81	broken	24.28
Geochelone	*elegans*		28.26	8.86	22.39	6.21	9.53	32.56	23.24
			28.4	9.11	23.04	6.1	12.53	32.21	23.18
Kachuga	*tentoria*		39.26	12.43	34.48	10.8	32.98	42.03	28.74
			39.17	11.61	34.61	10.28	30.97	43.34	29.59
Lissemys	*punctata granosa*		38.93	15.91	46.69	15.81	49.24	broken	29.2
			38.56	16.32	47.2	14.44	49.06	broken	25.83
Melanochelys	*trijuga*		52.56	14.66	57.59	14.9	39.57	51.16	35.13
			53.24	15.64	57.33	14.66	39.17	51.99	34.01

** measured maximum width of trochanter

*measured from one side of trochanter to other, over the head, rather than the width of the head

^measured from center of actebulum to the end of the blade

All specimens housed in Field Museum of Natural History Herpetological Collection, Chicago IL

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INDEX